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According to the exact, true, and genuine mind of Aristotle and the Angelic Doctor

NATURAL PHILOSOPHY

Part II:
ON TWO BOOKS OF GENERATION
AND CORRUPTION

NEW EDITION CAREFULLY REPRODUCED FROM THE LYON EDITION OF 1663, AND PURGED OF ERRORS

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SECOND PART
OF NATURAL PHILOSOPHY.

PREFACE.

After explaining changeable being in general in the eight books of Physics, and incorruptible changeable being, which is the heavens, which is usually treated in the second part of Philosophy, but we have insinuated some things about this matter in the first part. Now the third part would follow in order, but since something might be considered omitted by beginners in this science, and thus our course might be judged incomplete. We have affixed the title of the second part to this treatise according to our order, even though according to the order of Philosophy the title of the third part should be affixed. Therefore, it follows in this third part of Philosophy and according to our order the second to treat of corruptible and generable changeable being, according to all those motions which pertain to generation, or are ordered to it, for insofar as generable things can be ordered through local motion to acquire their natural place and situation in the universe, it pertains to treat of them in the books On the Heavens and the World, where although it treats principally of the heavens, it adequately treats of the whole universe which is also composed of elements, according to how they are arranged by the situation of bodies in it.

Aristotle comprehends everything that pertains to generable and corruptible being in two books. In the first he explains all the changes pertaining to generation and corruption. In the second he descends to explain the bodies to which these changes belong, namely the elements and mixed bodies, insofar as they are principles of active and passive qualities according to which these changes occur, and generation and corruption itself.

The changes which principally follow from generation itself, or can be ordered to it, are seven. The first and principal is substantial generation itself, and its opposite, namely corruption. The second and those which are more closely ordered to it pertain to alteration which is generically one, but is divided into three species: simple alteration, intensification, and remission. The third is nutrition, or speaking commonly, aggeneration. The fourth is augmentation. The fifth is reaction and repassion. The sixth is condensation and rarefaction. The seventh is mixture. All of these are treated by the Philosopher in the first book. Concerning generable bodies, he chiefly considers three things in the second book. First, concerning the elements, with what qualities they are endowed, and how they are contrary to each other. Second, concerning mixed bodies, how they are tempered. Third, concerning all bodies which are corrupted, whether they can be reproduced again by the very fact that they once cease to be, which can also be inquired about any other thing which is corrupted.

On the matter and subject of these books.

It is clear from what we said in the first question of the Physics, that the adequate subject of Philosophy is changeable being. Although the formal object is unique and indivisible, by the very fact that science is one according to atomic species, nevertheless the subject or matter is multiple, because one and the same science treats of diverse things, although under a single formal aspect. And so we inquire in the present, which part of changeable being pertains to the proper matter and subject of this treatise on generation, which is a certain part of natural science. And almost all agree that it pertains to these books that changeable being which is generable and corruptible, since in no other part of Philosophy is it treated except here, for in the books On the Soul it treats of animate changeable being, which although it is corruptible, is not treated according to its corruptibility, but according to the notion of living or animate being, and according to vital motions. In the books On the Heavens, as we said, it only treats of incorruptible motion, or of the whole universe as it is composed of simple bodies.

There can only be difficulty as to whether the subject of these books is changeable being in relation to substantial form, and thus only substantial generation itself is considered per se, while alteration and other changes ordered to generation are treated only as a secondary subject and as if reductively, or whether the adequate subject is generable being as it abstracts from what is generable substantially or accidentally, although the principal subject is what is substantially generable, or substantial generation itself.

It is answered that in the opinion of St. Thomas in the preface to the books On Generation, it seems truer that the subject of these books is generable being in the second sense mentioned, namely as it abstracts from what is generable substantially or accidentally, although the principal subject is what is generable according to substance, or substantial generation itself. For he says: "It pertains to these books to treat of motions which are not common to all bodies, but are found only in inferior ones, which are indeed all except 'where', which is also found in superior bodies." Among these, generation and corruption hold the primacy, for alteration is ordered to generation as to an end, augmentation also consequently relates to generation, where that causal statement of St. Thomas: "For alteration, etc." does not give the reason why alteration is treated in these books, but why alteration is a less principal motion than generation, and so alteration is not treated here only reductively, but as a less principal subject, just as Metaphysics treats of accident, but the principal subject is substantial generation, just as in Metaphysics it is substance or God, in Logic demonstration, for that is what St. Thomas means when he says that among these motions generation holds the primacy. The reason also shows this, because alteration and augmentation and the rest are truly species of motion, and per se: therefore Philosophy treats of them as something pertaining to it per se, and not reductively, just as it also treats of local motion in the books On the Heavens, and of augmentation here: therefore some part of Philosophy must be assigned which treats of them per se, just as it treats of local motion, but there is no other part in which alteration and augmentation are treated except in this one.

From this it is gathered that the subject of these books is the changeable in relation to intrinsic form, according to which generation or corruption occurs, or which is ordered to it. Nor does it therefore treat of something conflated from substance and accident, such that its subject would be something analogous, both because its subject is not accident and substance, but the changeable in relation to substantial or accidental form, which in itself is indeed subjectively substance, although terminatively it can be terminated at something accidental: and also because accident and substance can be treated in some science as a univocal object in the aspect of knowability, although it is analogous in the aspect of being, as is clear in Metaphysics, which is a single science and treats of accident and substance, because things analogically agreeing can well be manifested by the same light and from the same principles, and thus agree univocally in the aspect of being manifestable and knowable.

You may object: If it pertains to these books to treat per se of augmentation and nutrition, therefore it will not pertain per se to treat of it in the books On the Soul, the opposite of which we said from St. Thomas at the beginning of the Physics when distributing the parts of Philosophy according to the species of motion, in which augmentation, because it is vital, pertains to the books On the Soul, or augmentation will be treated twice in the same science. Secondly, it follows that this treatise on generation precedes the treatise On the Heavens, since in the treatise On the Heavens it treats of local motion, which is more imperfect than the motion of generation, since it is terminated at 'where', which is more imperfect than quantity, quality, and substance, to which these motions are terminated.

To the first it is answered that in these books augmentation and nutrition are treated not as they are vital motions and from a living soul, but as they are certain changes that are corruptive or partially generative. It is not inconvenient that the same thing be treated twice in the same science according to diverse considerations, just as in the books On the Heavens it treats of the elements insofar as they demand a determined situation in place in this universe, but in these books insofar as they are generable and corruptible. But at the beginning of the Physics we said that the motion of augmentation is treated in the books On the Soul insofar as it is vital motion and proceeds from the soul, not under the aspect of corruptive motion.

To the second it is answered that at most it proves that the books On Generation are prior in dignity to the books On the Heavens, but not in the order of doctrine since rather one proceeds from the more imperfect. I add that although local motion from the precise concept to its terminus, which is 'where', is more imperfect than alteration and generation, nevertheless the local motion which belongs to the heavens should be treated first in Philosophy than other motions, both because the subject of such motion is something more dignified and superior, namely the heavens itself; and because its motion has causality on the rest of inferior things, and thus given that one should begin from what is more dignified and perfect, one should also begin from this local motion which belongs to the heavens, because as such a cause, it is more dignified. Finally, local motion is more universal and belongs to more things than alteration and augmentation, for it is found in every body; but one should begin from more common things.

Order of questions.

We will complete the whole treatise in twelve questions, nine concerning the first book and three concerning the second. The first will be on substantial generation. The second, on the corruption opposed to it. The third on alteration in general. The fourth, on alteration in particular, as on intensification and remission, etc. The fifth, on reaction and repassion. The sixth, on mixture. The seventh, on condensation and rarefaction. The eighth, on augmentation and nutrition. The ninth, on the subject of accidents and the principle of individuation.

Concerning the second book, the tenth question will be on the elements: the eleventh, on mixed bodies; the twelfth, on the reproduction of a past thing.

QUESTION I.
ON SUBSTANTIAL GENERATION.

There are three things from which generation differs, namely from alteration, from corruption, and from creation, and consequently from transubstantiation, which totally affects the substance of a thing. And therefore substantial generation must be explained according to how it is distinguished from these three. However, first we must address the question of whether generation exists, and by what principles it was discovered by Philosophy, and how it is defined.

ARTICLE I.
What is generation commonly called, and generation proper to living things?

Generation commonly called can be taken for generation as it abstracts from substantial and accidental, for an accident can sometimes also be generated, namely if it receives being through transmutation from non-being, like change, and not only through transmutation from a contrary, like motion. Generation taken in this way is defined most commonly: That which is a transition or change from non-being to being, in a subject, whether it be substantial being, or accidental, or being in a qualified sense, or simply.

But substantial generation commonly called can be taken for generation commonly found in living and non-living things, and thus generation is defined: That which is the acquisition, or change of substantial form from its privation in matter. And this definition is taken from various places in Aristotle, where he explained it. For in the eighth book of Physics, text 62, he said: "Generation is a change from non-being to being." And in On Generation I, ch. 4: "It is a change of the whole into the whole with no sensible subject remaining," that is, in matter bare of sensible accidents. Finally, in ch. 5

of the same book he says: "Substantial generation is a change from substance in potency to substance in act."

Finally, the generation of living things has a special definition, because it proceeds in a more special way. And it is usually defined in two ways, in one way commonly, that it is the procession of a living thing from something: where both univocal and equivocal generation of living things is comprehended, both that which is from another living thing, and that which is from a non-living thing, as when an animal is generated from the heavens. But properly the generation of living things is defined, when it also occurs through vital generative action, and thus it is defined as the procession of a living thing from a living thing from a conjoined principle of life in the likeness of nature, at least in the lowest species, and thus it comprehends all vital generation, and of a substantial living thing even in God, as we will explain later.

However, it should be noted that substantial generation extends more broadly than generation simply. For substantial generation is said in contradistinction to accidental, whether what is generated is a part, or a whole, or of the form ultimately completing and terminating the whole generation, or of a non-ultimate form, but tending to a perfect and ultimate one. But generation simply, although it is never said of the generation of an accident, which is always in a qualified sense, nevertheless is not said of every substantial generation, but only of that through which being simply and ultimately complete is had. Hence the generation of a part is not called generation simply, but rather aggeneration; and of the form of an embryo, which is imperfect and as if on the way, and tending to the form of a man or horse, it is not called generation simply, because generation is not consummated in it, but tends further. On this see St. Thomas, On Generation I, lect. 8 and 9.

Concerning the definition of substantial generation commonly called, only this difficulty presents itself, whether it is of its essential nature that it be change, or whether this belongs to it accidentally, such that created generation could be preserved without change, for this is certain of uncreated generation, since in it there is no transition from potency to act, on which the nature of change is founded, but there is only the communicative assimilation of the generated term to the generating principle of pure act.

Concerning this, therefore, some think that generation is not essentially change, but can be, though this is accidental to it. The foundation is that it is not of the essence of generation that the privation of the form to be generated precede in duration, for although speaking naturally generation does not occur unless alteration precedes, as if disposing matter and beginning generation, and thus supposing that the privation of the form to be generated precedes in duration, nevertheless privation can not precede in duration, if in the very instant of generation matter is produced by God, which did not exist in all the preceding time, and in that instant form is introduced, as when something is generated from the Eucharistic species, for then in the instant of generation matter is substituted by God, which remains in the generated thing itself, and such matter could also be substituted, even if nothing else had preceded that takes the place of matter, and consequently would take the place of a thing deprived of form, as if matter were newly created by God, and an agent educing form were applied to it, then that generation could not be change, because it does not proceed from privation to form which is essentially required for the nature of change, which is from non-being to being, but then privation is not given in the whole preceding time, since matter did not exist, nor in the very instant of generation, because thus privation and form would be simultaneous.

Nor is it sufficient to say that privation precedes in an instant of nature, although not in an instant of time. For against this is that an instant, or priority of nature does not designate what is prior in existing, and on the part of the thing, but only signifies the formality according to which something is said to belong, or not belong to something, but not that it actually belongs, or does not belong, and thus for privation to precede in an instant of nature is nothing other than that form does not belong to matter according to its essence, or that it lacks such form of itself, but not that it actually lacks it in reality, because in that instant it cannot lack it, since in that instant it has form, therefore it is not preserved that there is actually and in reality change, because in reality it does not pass from privation to form, because in reality such privation is not given. Likewise also because it is of the nature of change that the subject be otherwise now, and before, as St. Thomas says, I, q. 45, art. 2, ad 2, but matter in that case is not otherwise now than before, since before it was not in the nature of things, therefore there will not be true change.

Nevertheless it must be said: Every created generation, which has a material cause from which it is made, is essentially and intrinsically change. This is clear first because the Philosopher perpetually defines generation through change, and thus he thinks that it is of its essence and definition. This is clear in this book On Generation, text 23, where he defines generation as the transmutation of the whole with no sensible subject remaining, and text 25: That generation is change from substance in potency to substance in act. And in Physics VIII, text 62: Generation is change from non-being to being, and in Physics V, text 7: That generation is change from non-subject to subject. Where Aristotle perpetually assigns change as the generic nature of generation, which is to be essential to it. Hence St. Thomas in De Potentia, q. 2, art. 1, ad 15, expressly says: "That generation is a species of change, on that part by which nature is received through generation in some matter, which is the subject of change": therefore he supposes that change is the generic predicate of change, and consequently is essential to it. And the same is taken from those places in which he teaches that generation and corruption are two changes, although they are not two motions, as in De Veritate, q. 28, art. 1 and 6, and I-II, q. 113, art. 6, as we will consider in the following article. Finally, the definition of motion given by the Philosopher in Physics II also applies to instantaneous change, and to generation, as we proved from Thomas and Aristotle in Physics III, q. 14, art. 1.

The reason is that generation essentially deals with two terms, from which and to which, for it educes or introduces some form which it regards as the term to which, since it is a tendency to such a term, and is specified by it, but if it essentially has a term to which, it also essentially regards a term from which, because it is impossible that some term to which be understood to come to be anew, except from some term from which, whether negative, or privative, or positive, but every transition, or tendency from a term from which to a term to which in a subject is essentially change, since one is abandoned, and another is acquired; for both are not acquired, or both abandoned, but one is taken, and the other is left: and this occurs in some subject; therefore generation is essentially change. And it is confirmed, because through the introduction of form in the instant of generation, even if privation does not precede in time, matter is formally reduced from potency to act, and the form itself is truly and properly educed from that potentiality of matter, therefore truly and properly matter is transmuted. The consequence is clear, because there is found there the potentiality of matter, and indifference reduced to act through form, and the form itself educed in act from that potentiality of matter therefore matter is found changed from potency to act, and informed through form, which information in the genus of formal cause takes away the potentiality of matter, and excludes privation in fact, therefore there is given change in fact: therefore also generation, which effects all this is change in becoming, just as through the form itself formal change is given, and in fact.

To the opposite foundation it is answered that in the case of generation from the Eucharistic species, we have already said in Physics II, q. 2, art. 3, to the last, that there the natural order of generation is not varied, because quantity conserved without a subject takes the place of substance in all things, and thus receives the preceding dispositions, by which matter is determined to generation, and consequently takes the place of matter deprived of form, and for this reason privation precedes in that generation not indeed in matter, but in the substitute for matter, namely in quantity insofar as it takes its place. But in the instant of generation matter is substituted by God, as composing the generated thing, with the same determination to form, which by virtue of the preceding dispositions preceded in quantity just as if matter had preceded for the whole time before, because it is produced as continued to that which took the place of matter before; and thus that generation is made from privation, which in that instant is expelled in fact from matter, but in the whole preceding time preceded not formally in matter itself, but virtually, namely in that which was held in place of matter. But in the case where nothing preceded before of matter nor of anything that takes the place of matter, and receives dispositions for generation, it is answered that then it suffices for the nature of change, such as is then found, that privation precede by priority of nature, not of time.

And when it is urged that if privation did not precede in duration, there will not be given in reality change from such privation to being, it is answered first that if change is then taken away, generation will also be taken away, and what suffices for generation to remain, suffices for change to remain. Hence I add that privation not preceding in duration suffices, but excluded and expelled in reality in that instant through form introduced by an extrinsic agent or educed from matter, so that change is given in that instant, which does not seek the existence of privation that it be given in reality, but the exclusion of privation in reality, but privation is excluded, even if it did not precede in duration through this alone, that the potentiality of matter is changed by an extrinsic agent educing form, and thus the lack of form is excluded, not through its own emanation, but through the action of an extrinsic agent, and thus change. And although priority of nature does not say existence, or duration of a thing, but only that by virtue of nature something belongs, or does not belong, nevertheless this suffices that the subject be said to be changed, when through the action of an extrinsic agent privation is excluded, not which was formally present but which ought to have been present, if through that action it were not taken away by educing or uniting form.

But to the last instance, that change says to be otherwise now than before, it is answered that in instantaneous changes, if some motion precedes them by way of required disposition, as commonly occurs according to the order of nature, then it is necessary that it be otherwise now, than before by priority of time, in which those dispositions and those motions precede, and similarly privation of the form to be generated. But if instantaneous change is taken according to its precise concept, and removing what precedes naturally, change says to be otherwise now than before by priority of nature, provided that in the subject privation is impeded, lest it be given, through the action of an extrinsic agent introducing form, for thence it must be regulated that it is change, not from the pre-existence of privation. And thus in another real instant there is privation not affecting the subject, but in being expelled from it through extrinsic action, because that priority of nature is not of existence, but of expulsion, and consequently of change for that instant, in which there is introduction of form.

And if you say: For rest does not suffice, that something be in the same way now, and before according to priority of nature, otherwise something could rest in only one instant, but it is required that it be as before by priority of time, therefore similarly it will be required for change, which is opposed to rest, it is answered that privative rest requires that something be now, as before by priority of time, but not negative rest, and similarly motion requires this, which consists of two changes, namely generation, and corruption, but not instantaneous change from its precise concept, as when it does not have an adjoined preceding motion, nor corruption of an opposite form. But motion which is properly opposed to rest, is that which includes two changes, of corruption, and generation, or which is successive motion, in which is found to be otherwise now, than before by priority of time, but is not required for instantaneous change, just as neither for negative rest.

On the generation of living things.

Concerning the definition of generation in living things, two parts need to be explained. One is how it is a procession from a conjoined principle of life. The other is in the likeness of nature. To explain the first part, it should be noted that for the generation of a non-living thing, it is not required that the generated thing or the matter from which it is generated be conjoined to and within the generator. It suffices that the matter be juxtaposed and extrinsically applied, so that something may be generated from it, just as fire generates fire from wood placed next to it and applied, not united within it. But living things form what they generate within themselves, and provide the matter from which it is generated from their own substance. Indeed, the more perfect the nature of the living thing, the more conjoined the generated thing is to its generating principle, such that in intellectual nature, the thing which proceeds from the intellect not only when it is made and formed, but also as long as it exists, remains within the intellect, and is not emitted to another power or subject. And from this St. Thomas distinguishes in Contra Gentiles IV, ch. 11, and in III Sentences, d. 8, q. 1, a. 1, different grades of emanation in living things according to this, that the generated thing is more or less conjoined to its generating principle. As we see in plants and animals, seed proceeds and is separated from them, in which is the formative power of the generated thing, and the matter from which it is formed. Hence the fetus itself in the beginning is bound to its generator, or fruit to the tree, fetus to the womb of animals, but then is later separated when it is born. Therefore it is said to proceed from a conjoined principle of life, both because the matter from which it is formed and the formative power of the seed are separated from the generator, and because it is first bound to it and formed within it before it is born. In sensitive life, cognition is produced through the sensing powers themselves, which is more intimate to its principle, because it occurs through immanent action, but nevertheless is not totally intimate, both because it requires a principle from without, namely an impressed species, and produces some terminus, namely an image or species in other powers, namely from the external sense to the common sense, and from the common sense to the phantasy, and from that to memory, as will be said in On the Soul III. In intellectual life, the emanation of cognition is still more intimate to its principle, because although in us it requires impressed species coming from without, nevertheless the expressed species or word which is formed through them does not pass to another power, but remains in the intellect itself. However, there is a higher intellectual life in angels, who do not receive species from without since they lack senses, but species are born or infused by God within the intellect itself, and the expressed species itself remains within the intellect, but nevertheless, because it is an accident and not a substance, it does not arrive at perfect generation. Therefore the most perfect generation in every respect is in God, in whom both what proceeds is substance, and is so conjoined to its principle that it is one and consubstantial with it, according to John 10: "I and the Father are one." This whole discourse is from St. Thomas.

The second part is "in the likeness of nature", in which is designated what sort of thing should proceed in generation, and what sort of mode of proceeding. For it is required for the generation of a living thing that what proceeds be not only generated, but also a son, for hairs, nails, worms, and other similar things are generated from a living thing, which proceed actively from the living thing, with it providing the matter from which they are formed, yet they do not proceed as sons, because not in the likeness of nature. Secondly, it is required that generation itself be essentially assimilative, not only concomitantly or in the first mode per se, but also in the fourth mode per se, such that this is per se in that mode: "The generator assimilates", just as this: "The hot makes hot"; "The doctor heals", because generation is an action propagative of nature, and so should be productive in the image and likeness of the generator, as if expressive of it, which is to be assimilative in the fourth mode, and not only in the first mode per se.

By this reasoning it is understood how in the Divine the procession of the Word is generation, and not the procession of the Holy Spirit, because the procession of the Holy Spirit is indeed a procession of a similar thing identically and concomitantly, indeed even essentially in the first mode per se, because it is a procession within God and by general notion, whatever is within God is God; but formally and in the fourth mode it only proceeds as Divine impulse, to which from the fact that it is Divine, similitude belongs not so much as identity essentially in the first mode per se with that from which it proceeds, and thus its procession is not assimilative. But the Word, from the very formal reason by which it proceeds, proceeds within the intellect as image, and as similar in the fourth mode per se with the generating principle, and not only by reason of identity because it is within God, and therefore it is most properly generation and assimilative procession in substance and nature, namely in Divine understanding and being understood itself, just as if a man could produce another man from the dust of the earth and by the artifice of his hand, and likewise through seminal propagation, he who would proceed through propagation would be a son, but he who was artificially produced would not be a son, although both would essentially be true men. Thus therefore it is required for generation that something proceed in likeness, both on the part of the generated thing itself, and on the part of the mode of proceeding in an assimilative way, and this as far as is from the power of generation, for accidentally from some impediment something can degenerate from perfect likeness, like a monster, and then it will be true generation, but deficient, and properly degeneration.

ARTICLE II.
By what principles does Philosophy attain that there is substantial generation?

The whole difficulty among the ancient Philosophers concerning the investigation of substantial generation consisted in this, that they could not understand prime matter, which would be in potency to being simply, and yet would in itself be a being in reality, and consequently they could not understand substantial form, which would give being simply to matter, namely the very first being, for thus matter would of itself lack all being, and consequently would not be a being; but from non-being, being does not come to be, because from nothing, nothing comes to be, as the Philosopher treats at length in Physics I and in this book I On Generation and in Metaphysics I, ch. 2. And so we said in Physics q. 3, that unless matter is posited to be a being in potency, such that it lacks all entitative being of itself, by this very fact we lack any principle to show that there is substantial form, which gives the first being which is being simply, and substantial.

Wherefore from this it becomes manifest that according to Aristotle and St. Thomas who follows him, it was entirely unknown that prime matter would have of itself an entitative act, and incomplete existence, because the ancients thought that matter was non-being, and altogether nothing by the very fact that it was being in potency, as is clear from the Philosopher in this first book On Generation, text 12, where he says: "This is what the ancient Philosophers most feared in assigning substantial generation, lest something be generated from nothing pre-existing." Explaining this, St. Thomas there in lect. 6, near the end says: "What the Philosophers most feared to express, that something would be generated from nothing pre-existing, for what is not being in act, is nothing. Thus therefore it seems that there could not be generation simply in this way, that substance be generated from non-being in act, but being in potency." Therefore the ancients thought that matter, by the very fact that it was being in potency was nothing, and consequently lacked entitative act or partial existence, for if it had that, it would stand well that matter would be being in potency with respect to forms, and yet would not be nothing, because to be nothing, it ought to lack all existence even partial. But the ancient Philosophers inferred that if it were being in potency, and not in act, it was nothing, therefore they thought it lacked all being even partial if it were being in potency. But Aristotle rejecting this opinion of the ancients does not say that matter has entitative act or existence, although it is in potency to forms, but says that matter is not nothing, but exists insofar as it is under different forms; by reason of which the generation of one is the corruption of another, and thus generation occurs per se from being in potency, but per accidens from being in act, because it is per accidens to generation that matter existed under this or that form, which is corrupted, through which it has being in act, as he teaches in Physics, text 66, and in On Generation I, text 17, as St. Thomas explains there in lect. 7, near the end. But if matter, as it concurs to generation per accidens is being in act, that is, through the form which is corrupted, Aristotle manifestly supposes that matter of itself does not have entitative act, or partial existence, otherwise generation would occur from being in act per se, because not through form, but through its own entity it would be existing, or being in act.

Wherefore the principle for showing against the ancient Philosophers that there is substantial generation, and that substantial form is introduced into matter, is taken only from two sources. First, from the being that distinguishes substance from accident, namely being per se, which is first and underlying others, because if there is substantial generation it ought to give being per se, and introduce a form which gives such being. Second, the principle is taken from substantial corruption which is opposed to generation. For if this occurs, so does substantial generation. Therefore proceeding in the first way it is necessary to take as a principle that matter is being in potency without any entitative act, because substantial generation is supposed to be that through which substantial being is acquired or being simply is made, and because the ancients said that whatever is a being, ought to be being in act, consequently they inferred that if generation supposes some being for a subject, it ought to suppose being in act, and thus no generation is given which can make substantial being itself, that is, the first and fundamental being, which is substantial. Therefore since according to Aristotelian principles we admit that nothing comes from nothing, and again, that substantial generation makes being simply by giving the very first and substantial being, it is necessary to say that the subject from which substantial generation occurs, namely prime matter, is neither nothing nor being in act of itself, but in potency per se, and in act through another, namely through form. But if once matter is posited to be being in act of itself, and existing through entitative act, it cannot be proved against the ancients that the form coming to it is substantial, and that generation is substantial giving first and integral being, unless it is proved against them that even if partial being is supposed in matter, through the form coming to it, substantial being can result, and the parts themselves can be substantially conjoined. But for this no principle is given in Aristotle, nor can it be given, unless the principle is begged. For it cannot be established for us against those denying substantial generation and substantial form, as the ancients denied, saying that matter is the whole substance of a thing, I say it cannot be established that some form and nature are substantial, except by reason of the substantial being itself (that is, first and underlying all) which they provide. But if they presuppose some partial being in matter, this way is closed, and this principle is weakened. For whence will it be proved that the being which form gives is first and substantial, if it supposes another in matter to which it comes? And if it is said to be partial being. This remained to be proved, and is to beg the question, for the ancients denied that substantial form is given, but that matter is the whole substance of a thing. Whence therefore is it proved that those partial beings of prime matter and form so make one, that they constitute generation simply? Just as if some integral part is produced, and is conjoined to another already having being, that change will be aggeneration: and not first generation, because it supposes some first being, so if being is supposed in matter, and produced form adds to it another being, even if it is partial, it cannot be proved that it is generation simply: because from the very first being, whence this substantiality ought to be proved it is not proved, since some being is supposed in matter, and thus the ancients would say that form does not give first being, and being simply, but addition or aggeneration to presupposed being, but in our opinion, since there is only one being, which through form as through a principle belongs to the composite and actuates matter, it is the same to give being to the composite through form, and to give first being, and being simply. But it is not proved otherwise against the ancients that these two parts are substantial, namely matter and form, unless either it is supposed that such parts are given which they themselves denied, and thus it would be to beg the question, or it is proved to be substantial, from the fact that they are necessary for generation and corruption, and this again is what they themselves denied to be given namely substantial generation and corruption, but only alteration, which would make latent forms appear, or hide them. Wherefore unless it is said that form gives the very first being, and consequently that matter is so in potency to form, that it supposes no being in itself, but has all through form, substantial generation is not proved against the ancients.

From the second principle it is proved that there is substantial generation, namely from corruption itself. For it is clear that there is substantial corruption, therefore there ought to be generation. The consequence is good, because if forms when they cease are substantially corrupted, therefore when they begin, they are substantially generated, and do not only appear anew, otherwise when they cease, they would only be hidden. But the antecedent is proved, both because if there were not substantial corruption every substance would be incorruptible in substantial being; and because if form is not corrupted, but remains in matter or is not distinguished from matter: therefore its proper passions will also remain, for there is no reason why we should separate proper passions while form and nature, of which they are, remain; but it is clear that when an animal dies the sensitive powers do not remain in the earth, or fire, into which it is converted. Nor can it be said that these powers remain there, but impeded and latent, for thus if in fire, for example, there is the power of seeing and hearing, but nevertheless impeded, fire would be blind and deaf, because it has these powers with impediment. Finally it is clear that there is substantial corruption in man, because when he dies the soul remains separated from the body, otherwise man would not die, if the soul remained united to matter, and man would be substantially incorruptible; for the soul does not lie hidden in matter, nor is it educed, but comes from without. Therefore when the soul departs it is necessary that in matter a new form begin to be through true generation, since the form which it had is substantially separated from it.

Other proofs are usually brought by other authors which have little efficacy against the ancients, for example, that prime matter is in passive potency to all forms, that diverse substantial forms are given, that diverse accidents and operations ought to follow diverse forms, because matter of itself is indifferent to all things. For these beg the question, because this was what they themselves denied, namely that substantial forms are given, or that accidents follow a form newly arriving, but newly appearing in matter, in which according to itself it was hidden, because they said that matter is being in act, and does not need substantial form giving it first and substantial being, but supposing the existence of matter, and thus every form newly arriving will be accidental, because the proper nature of substance will not belong to it, which implies first being, which is underlying others. Wherefore unless it is affirmed that matter is being in potency in such a way that it also has first being through form, these proofs are emptied.

Against substantial generation thus explained there are few things which make difficulty. For the argument of the ancients by which they were moved does not have force. For they said that form cannot be given which gives first being such as substantial ought to be, for thus that form would come to a subject having no being, since form gives first being to the subject, therefore that subject is nothing, and thus simply something would be made from nothing, which is not to be generated but to be created. To this it is answered from the doctrine of Aristotle and St. Thomas, that prime matter is neither nothing, nor being in act or existing through itself, and by reason of its own entity, but is existing through another, namely through form, and thus of itself it is being capable of existence, as also of form, although it is not form itself, nor existence itself. But what is capable of existence either truly is being, and is not nothing, as it is contradictorily opposed to being, because nothing neither through itself, nor through another is capable of existence, but matter, as subject to form, truly exists, but not without form, indeed even substantial composite itself, without the mode of subsistence, and without accidents does not exist, nor operate.

Secondly you will object: Because in the very substance which is generated, only essence and existence are found, essence cannot be made, since when essence is removed, only essential predicates remain, which are of perpetual truth, and independent of time. But existence is not substance, but is something accidentally belonging to substance, supposing that it is distinguished from it, indeed even the generative action itself is an accident of the category of action: therefore its term is an accident.

It is answered that essence is not made, nor produced on the part of the essential connection of predicates taken objectively, for thus objectively it is of eternal truth, but subjectively, as existing in itself the very essence is produced, and substance, as subject to existence, so that essence is related as the existing thing, but existence, as that by which it exists, as the term of actual production, and of being outside causes. And although existence is said to belong accidentally, nevertheless not as a predicamental accident, but accidentally predicably, as a mode, or term of substance, which is reduced to its category. But truly essence itself is produced, as subject to existence, not separately from it, just as neither separately from production, but through it, and nature is not produced separately from the composite, or supposit, but in it. But essence as it is subjected to existence is something temporal, and not eternal, nor of eternal truth, because through temporal action existence is given, and the subjection of essence to existence. But generation is formally an accident of the category of action, but terminatively regards substance, because it goes out from generative power in virtue of substance, and therefore is an accident, and yet tends to producing substance.

Finally it is argued: Because if one generation succeeds another, it follows that many things diverse in species participate in the same matter, and thus will not be substantially, and in every part diverse. Similarly also matter will pertain to diverse species, now to one, now to another as there will be diverse forms to which it is united, and thus will not remain simply the same, since it takes actuality and species from form.

It is answered that it is not unfitting that things diverse in species have common matter, as they do have, not however informing simultaneously, but successively, because matter is thus capable of all forms, and in potency to them. And thus they do not share in the same matter in number, but the same matter according to potentiality serves for diverse forms in diverse composites, successively one form excluding another, and constituting a diverse composite, which is not unfitting. Nor is it unfitting that matter participate through information in diverse species of forms and constitute diverse composites successively, because it is in potency to them, but of itself it has only potential entity, which indeed it does not receive from form, but by receiving forms in itself, it is actuated by them, and is reduced in act to that species by which it is informed, for since matter is a part of the species and of the composite which it constitutes, it can be reduced in act to many species, because it is in potency to all.

ARTICLE III.

In what action and change does substantial generation consist?

To understand and distinguish substantial generation among the many actions that contribute to it, we must investigate two things. First, whether substantial generation is an action and change distinct from the entire dispositive action that operates in matter through alteration, or whether generation results without a new action once alteration has been carried out up to the final disposition. Second, in the generative action itself, we must determine which formality we should assign as the very nature of substantial generation, for in the generative action we find the notion of eduction or production of form, similarly the notion of union of form to matter, also the notion of conversion, and other similar things, among which we must discern what formally pertains to the nature of generation. As for the actions subsequent to generation, we need not investigate how generation is distinguished from them, because once generation is completed and over, it is clear how the remaining actions are distinguished from it and do not pertain to constituting generation, but presuppose it, such as nutrition, growth, and other similar actions. We will discuss in article VII from what principle substantial generation immediately proceeds at that instant in which it is perfected and in which the form is introduced.

Regarding the first point, some think that generation is not an action distinct from alteration, but that given alteration, generation as it were results and follows from it, and this is called generation, and it is related as the terminus of alteration, not indeed produced by alteration and specifying it, for this is quality, but following and resulting without new efficiency due to the natural connection with those dispositions, just as properties result once the essence is posited, without new efficiency. The foundation for this is taken, first, from certain statements of St. Thomas in which he frequently repeats that generation is the terminus of alteration. And especially in the treatise De Natura Materiae, that is, Opusculum 42, he says: "Alteration, by which matter is stripped of the prior form, in itself requires a subject actually existing, because it is motion, but in its terminus it does not require a subject actually existing, for its terminus is generation." And speaking of human generation in Summa Theologiae I, q. 118, a. 2, ad 4, he says: "Man generates his like inasmuch as by the power of his seed the matter is disposed for the reception of such a form." Here St. Thomas constitutes generation, even reduplicatively as generation of a similar thing, in the dispositive action of the seed.

Next, the foundation is taken from reason, because accidents alone cannot produce substance by a substantial action distinct from accidental action (for accidents produce per se), nor similarly can substance by itself immediately produce such a distinct action, since it is not immediately operative. Nor similarly can an accident, as moved by substance, produce that distinct action, because there is the same difficulty about that motion as to how it proceeds from substance, and not through another accident as medium. But if an accident does not receive a new and more excellent motion to produce substance, then the very same action by which it produces an accident, not having become more excellent or elevated, produces substance, and this is what is intended, that the same action which attains heat passes to the substance of fire by means of the positing of heat resulting from the connection to it.

Nevertheless, the opposite must be said. Generation is an action distinct from alteration, and substance does not result from alteration or from the quality produced by it as proper properties result from essence, but is produced by true efficiency distinct from the efficiency by which quality itself is produced through alteration. St. Thomas never said that substance itself results from alteration or from the quality produced by it, but that generation (that is, the action itself) is the terminus of alteration. But if substance resulted from it, generation would not be called the terminus of alteration, but the thing generated itself. If therefore generation itself is the terminus of alteration, it is a distinct action from it.

That St. Thomas posits generation itself as an action distinct from alteration is clear first because in Contra Gentiles III, ch. 67, he says: "If accidental forms, which are in corporeal things, have their own proper actions, much more does substantial form have some proper action; but this action is not to dispose matter, because this is done through alteration, for which accidental forms suffice; therefore the form of the generator is the principle of action, so that substantial form may be introduced into what is generated." Thus St. Thomas, where he distinguishes the action introducing substantial form from the action disposing matter, which is alteration, for which he says accidental form suffices, but for the former he requires the substantial form of the generator, though not as proximate principle. Likewise, generation and corruption are called the terminus of alteration in such a way that they also have their further termini, and insofar as they have further termini, they are not the generated or corrupted substance itself, but the action or tendency to it. The antecedent is proved from St. Thomas in Summa Theologiae II-II, q. 164, a. 1, ad 7, where he says: "Death can be taken in one way for the privation of life itself, in another way according as it names the corruption itself which terminates in the aforesaid privation. But about corruption, as also about generation, we can speak in two ways: in one way according as it is the terminus of alteration; in another way corruption can be taken with the preceding alteration, as someone is said to be dying while moving towards death." See how St. Thomas both acknowledges that corruption is the terminus of alteration, just as generation itself is, and yet says that corruption terminates in privation, and therefore similarly generation will terminate in the opposite of privation, which is form. Therefore he thinks that generation and corruption are not only something distinct from alteration as a produced or resulting terminus, but as an action inasmuch as it regards a terminus.

The foundation of the position asserted is that the alteration which proceeds throughout the whole time preceding the instant of generation exists in the subject that is ceasing and being corrupted: therefore the generated substance itself cannot result from such alteration unless a new and distinct action producing the substance itself intervenes. The antecedent will be established below in articles VI and VII, and is conceded by the authors of the opposite opinion, because alteration is not subjected in bare matter, since it is motion, but in the composite, and before the instant of generation there is not given a generated composite, but one to be corrupted in the instant of generation: therefore alteration is subjected in it. The consequent is proved because generation cannot result from alteration in that subject in which alteration exists, since it is corrupted through generation, and thus generation does not result in it, since they are incompatible, the thing which is generated and the subject in which that alteration preceding the instant of generation is. But if generation results in another subject, in which alteration does not exist because it is corrupted at the corruption of the subject: therefore such generation cannot result from it, otherwise there would result from it that which destroys it, but this is impossible since resultance is founded on necessary connection, and per se of one with another, but it cannot have necessary connection by way of resultance with that with which it is incompatible.

Hence it cannot be said that for this resultance it is not required that alteration exist in the same instant in which generation results, but it suffices that it existed immediately before and remains virtually in the instant of generation. For in this we base the whole force of the argument made, because it is repugnant for something to be made by resultance and not by a new action by this very fact that it does not exist, but has incompossibility with that, because resultance, as distinguished from action, is founded on necessary connection, and per se of one with another, such that when one exists, the other resulting exists, because they are made by the same action, and when the first ceases, the second ceases, just as the property itself results from essence and exists with it. But alteration as it is action and motion in the subject itself which is corrupted ceases and does not exist in the instant of generation: therefore the generated thing does not result from it, nor does it have being from it by resultance, since rather it is incompatible with it in the same instant. But if you say that this connection intervenes because that disposition necessitates generation, it is replied that there intervenes connection and necessity of one action with another action, that is, of alterative action with generative action, and thus the agent is necessitated to that second action from the supposition of the first, just as given the assent to premises the intellect is necessitated to assent to the conclusion, and yet the assent to the conclusion is a distinct act from the assent to the premises. This connection of actions, however, supposes generation to be a distinct action, otherwise it would not follow by virtue of connection as distinct from the first, but not that by the same action by which one terminus is made without a new action, another results by virtue of connection alone, like proper properties.

To the first foundation of the opposite view taken from the statements of St. Thomas, it is replied that when he says generation is the terminus of alteration, the sense is that it is its end as a more principal action, to which alteration is ordered, not as to a thing produced by resultance, but as to a distinct action which, given alteration as disposing, arises necessarily from the generator, just as if it were said that assent to the conclusion is the terminus of assent to the premises. This is made manifest from the very doctrine of St. Thomas, for he says in Quodlibet XI, a. 4: "Through alteration matter is disposed to form and through local motion a luminous body approaches the position in which it illuminates, and according to this it is said that generation and corruption are the terminus of alteration, and illumination of local motion." And he says similar things in Summa Theologiae I, q. 53, a. 3, where he equates local motion with respect to illumination with the motion of generation with respect to alteration, but it is clear that illumination is an action distinct from local motion, therefore also substantial generation is an action distinct from alteration, and thus is explained what St. Thomas says in Quodlibet VII, a. 9, that alteration has two termini, namely quality and substantial form. It is understood to have two termini not by way of resultance of one terminus to another, but by way of ordination of this action to another. And thus also is expounded what he says in Opusculum 1, that the terminus of alteration is generation, it is understood that it is the terminus by way of end as a distinct and more principal action, not that the generated substance itself arises by resultance from alteration without a new action.

To that which is adduced from St. Thomas concerning human generation, it is answered that man is said to generate his like inasmuch as matter is disposed by his power, not by producing or educing the form from matter, as in other generations, but because by disposing matter he unites the form to it and thus attains it as united. This exposition is taken from St. Thomas himself in De Potentia, q. 3, a. 9, ad 6, where he says: "In other generations the generator is the cause of the form itself, but in the case of the rational soul it is the cause of the union of such a form to matter by disposing the matter for it, and it need not be the cause of the form itself." But whether, just as when form is produced in other generations, and there is a distinct action producing the form from the disposing alteration, so too when the human form is attained unitively it is attained by a distinct action, St. Thomas does not say. And on this there are diverse opinions, for Ferrara in Contra Gentiles III, ch. 89, seems to admit only that man by the power of semen produces nothing but dispositions by which the body is disposed to be a participant of the rational soul, to which dispositions the union of the soul in the body necessarily follows, by reason of which the power of semen is the cause of the aforesaid union. And this because the action of man cannot terminate intrinsically in the rational soul, which is spiritual, therefore it terminates only in that which is on the part of matter, that is, in the dispositions.

But Cajetan in Summa Theologiae I, q. 118, a. 2, concedes more than dispositive attainment, namely an action which per se terminates in the union of soul to body, not indeed on the part of the soul, for thus it is infused by God while being created in the body, but on the part of matter insofar as it makes not only dispositions, but also that matter is subjected to form, not indeed by attaining the very being of the form, but its being-in, or communication to matter, insofar as in a corporeal and material way matter is subject to and united to form and terminates in the soul insofar as it is eminently a corporeal form, although in itself it is spiritual. For thus it is more properly and formally saved that man generates man, and that the human form is the formal terminus of generation, as informing and communicated to matter.

To the foundation sought from reason it is answered that generation, as it is an action distinct from alteration, proceeds from substance through accidents, as they have the character of instruments of substance, as we said in Physics q. 12, and is taken from St. Thomas in Contra Gentiles III, ch. 69 and Summa Theologiae I, q. 115, a. 1, ad 5, where he says: "A body acts both to accidental form and to substantial form, for active quality, such as heat, although it is an accident, nevertheless acts in virtue of substantial form, as its instrument, and therefore can act for substantial form just as natural heat, insofar as it is an instrument of the soul, acts for the generation of flesh, but it acts for accident by its own power. Nor is it against the nature of accident that it should exceed its subject in acting, but that it should exceed in being." Thus St. Thomas, who can also be seen on this in Summa Theologiae I, q. 45, a. 8, ad 2. Therefore St. Thomas acknowledges that accident has sufficient motion to attain substance by this very fact that it is the power of substance which is rooted in it, and as something of it, and as its instrument produces, otherwise it would produce only by its own power, if it operated precisely according to what it is as quality, and not as something of substance. But what this motion adds above the power itself, that it may be an instrument of substance, we said in the cited q. 12, a. 3, and St. Thomas can be seen in Summa Theologiae I, q. 118, a. 1, ad 2, where he says: "That active power which is in semen derived from the soul of the generator is as it were a certain motion of the soul of the generator itself, and is neither soul nor part of soul except in power, just as in a saw or axe there is not the form of a bed, but a certain motion to such a form, and therefore it is not necessary that this active power should have any organ in act, but it is founded in the very spirit enclosed in the semen." And he teaches the same in De Anima, a. 11, ad 2. Therefore St. Thomas acknowledges that this power has no other force besides the motion of the generator, which is nothing other than the egression of such power from it, for after the power has gone out from the generator, it does not receive another motion in it.

But if you say: For in instruments the same action which attains the proper terminus, the same as elevated attains the terminus of the principal agent, therefore similarly the instrumental power of the generator by the same action which is alteration attains the proper terminus of alteration which is quality, and the same as elevated will attain substantial form itself as generation, it is answered that this now does not pertain to the opinion which we are attacking, which says that the generated thing itself results once alteration is posited; the objection, however, proceeds about true efficiency attaining instrumentally the generated thing through alteration. The truth, however, is that alteration is not the instrumental action itself, which by elevation of a superior agent attains the principal effect, but is the action of what precedes having its terminus which is position, and is subjected in the corrupted thing, and is ordered to the generative action as to the principal, which follows and inheres in the regenerated thing itself. Hence the power of the generator moves in a certain order by a twofold ordered action: first through alteration to disposition, which is its proper terminus; second through substantial generation, in which it acts from a certain motion of the generating substance. And in this that power has the character of instrument, for although it first operates as principal cause its proper effect, which is disposition itself, nevertheless afterwards instrumentally, as the power of the generating substance, it attains the generated substance itself. Nor is it necessary that in instruments there should always be the same action, that which precisely operates disposition and that which introduces the principal form, but it can be a diverse action, especially when it is necessary that the preceding disposition be corrupted through the production of the principal form.

Second difficulty.

Concerning the second difficulty it should be noted that generation has several formalities or respects, for it has the character of mutation, conversion, eduction or union, production, and finally corruption, which follows from it. It has the character of mutation with respect to its subject, which is matter insofar as it precisely reduces its potentiality to act. It has the character of conversion also with respect to matter with respect to forms, of which it abandons one and receives another, and thus turns one into another. It has the character of eduction with respect to form insofar as it comes to be and exists dependently on matter and through its transmutation. It has the character of union insofar as it applies and changes both matter and form for the communication of the same unity in the composite. It has the character of production with respect to the whole composite, which it newly places in being, or even with respect to the form which it educes. Finally, it has the character of corruption with respect to the preceding composite which it destroys, and it need not destroy the form, as is clear in the corruption of man, but it suffices that it remove it from matter and corrupt the composite.

All these formalities pertain to one and the same action, which is clear because that action tends from one power and in order to one singular terminus. But whatever action is in the individual regards the terminus a quo and ad quem and the subject, therefore it founds all these formalities or respects which are found in matter and in form and in the terminus a quo and ad quem and in their comparison to each other.

In which of these formalities generation more essentially and properly consists, we will say in the following article treating of the formal terminus of generation, for this resolution depends on that, by treating what is the formal terminus of generation: for it is clear that since generation is action and mutation, it should be taken more formally in order to the terminus ad quem than according to formality and respect to the terminus a quo.

It is only necessary to note at present how generation is called conversion, which will be clear by explaining what is required for conversion. For five things are required for it: first, that the converted terminus, which is the terminus a quo, cease to be, because if it remains it is not turned into another. Second, that the terminus ad quem, or converting, begin anew, either absolutely in its being, or at least according to some new mode of being, just as Christ is in the Eucharist in another way than in heaven. Third, that between the converted terminus and the converting there be some connection or dependence insofar as one succeeds the other, and thus at least in succession itself they are connected. Fourth, that it be between positive termini, of which one is corrupted and another generated, and that it not be corrupted absolutely as if by annihilation, but by ceasing into another into which it is converted. Fifth, that something common to both the converted and converting terminus remain, either by way of subject, as in generation, or by way of extrinsic accident, as in transubstantiation; although it seems probable that absolutely conversion can be done by God without this condition, as if He were to convert the whole substance of bread and its accidents into the substance and accidents of Christ or an Angel; but then it would not have so properly the character of conversion. Hence it is clear that the formality of conversion and of motion are diverse, although both are between positive termini to constitute latitude and distance to be overcome through motion, but conversion does not regard positive termini as they constitute latitude and distance to be traversed through motion, since conversion can be saved without motion, as in transubstantiation, but that something may not be made from nothing, but something be supposed to be transferred and transposed into another.

Conversion is either substantial or accidental. Accidental is when transition is made from one accident to another, as when white becomes black, and this is always conjoined with motion: substantial is when transition is made from one substantial form to another, and this always has conjoined a twofold mutation, one generative, the other corruptive. Likewise, one conversion is formal, another total; formal is when, some subject remaining, transition is made from one form to another: total is when the whole entity or substance, with no common subject remaining, passes into another, as transubstantiation in the Eucharist, and this cannot be done naturally, because no natural action operates except with a presupposed subject or matter, not destroying it. On which see St. Thomas in Summa Theologiae III, q. 75, a. 8, where he designates ways of speaking in these conversions.

From these things it is gathered that generation is conversion, because although generation has privation for its formal terminus a quo, nevertheless because this preceding privation in the natural mode is conjoined to some positive form by reason of which the generation of one is always the corruption of another, and that form which is corrupted is not annihilated but ceases into another, therefore truly and properly conversion intervenes in substantial generation. And the formality of conversion differs from the formality of generation, because generation has privation for its terminus a quo, conversion has form as to be changed into another succeeding. And thus it is one action, but a twofold mutation, as has been said, because a twofold form is changed, one from non-being to being, which comes to be anew, the other from being to non-being, which is corrupted, yet the action is one, because from one agent one causality emanates, which regards a twofold terminus, one a quo, the other ad quem, between which one distance to be traversed through motion and action is constituted. But in the generation and corruption of man conversion is not made into the substance of the rational form, or from it, because it does not cease, but into it as informing, or ceasing to inform.

ARTICLE IV.

What is the formal terminus, and what is the adequate terminus of substantial generation?

We distinguish in generation the adequate, or total terminus, and the formal, or specifying terminus. The first is usually called the terminus ut quod, or that which is produced. The second is the terminus ut quo. In the adequate terminus, or quod, we consider all parts, the integral nature itself constituting it, and the subsistence by which such a nature subsists, and the existence by which it exists. For nature is said to subsist in the subsisting supposit, just as parts in the whole itself, not because nature or parts are rendered supposits or persons in themselves, but because they are rendered terminated and affected by the subsistence itself and personality in which they are, just as parts of a line are terminated by a point, not because they become a point in themselves, either per se or per accidens, but because they are affected and terminated by a single point, just as a body is affected by whiteness, it does not become whiteness, thus parts are reduced as terminated by that point, and parts of nature, and nature itself through subsistence, and the supposit is not rendered in itself another supposit or person, but by one and the same subsistence it is rendered supposited and terminated, or subsisting. Hence this sophism is not valid: Nature subsists through another, that is, through person, but supposit subsists through itself, therefore nature and supposit are different and other subsisting things. For it is answered to the antecedent that nature subsists through another, which is the reason for subsisting, and is communicated to it, that it may subsist, I concede; through another which in itself is a subsisting thing, as quod, I deny. To the consequent therefore it is other and other subsisting as quo, I deny the consequent therefore it is other and other subsisting as quod, I deny the consequent, one as quo and the other as quod, let it pass; but this is to be distinct in the notion of entity, not of diverse subsisting thing, just as white and whiteness do not make two whites as quod, but one as quo, and another as quod, for whiteness is called white as quo, that is, the reason and form of white although they are two entities, body and whiteness. The formal terminus is that by which something is constituted as actuality and specification. But that by which the generated substance is constituted in its species is either the partial form, or the total form. The total form is the integral nature, or consisting of form and matter united as distinguished against supposit or person, and is signified by way of form, because it is signified as the principle by which something is such, just as humanity is that by which man is man. The partial form is that principle which is distinguished against matter, and united to it composes nature, and the supposit results, or the terminus of nature, unless it is impeded by Divine assumption. We inquire therefore in the present, first about the total terminus, whether it is the composite itself as nature, or also the supposit which is its terminus. Second, about the formal terminus, whether it is the form itself, or its union in matter. In this matter there are various opinions of Authors, about which can be seen the Conimbricenses in 1 De Generatione, chapter 4, question 15, and the Carmelite course in disputation 2, question 3. For concerning the total terminus some have said that some action terminates in the composite, distinct from that which terminates in the form, because they are distinct things. But others say that generation terminates intrinsically in the form, but extrinsically and secondarily in the whole composite, and as if by resultance, not as essential terminus. Finally, others posit for the adequate terminus the composite itself, which is nature, but they exclude the supposit itself or subsistence.

Concerning the formal terminus also the Authors are divided, for some say that the form alone is the formal terminus, even if it itself is not produced, but only the union. But others say that the union alone is per se the formal terminus of generation, but not the form, because in every generation the union is produced anew, but the form is not always produced, as when man is generated, but it is necessary to assign for the formal and specifying terminus of the action something made anew, because action if it makes nothing new, is not action. Finally, others say that the form is the formal terminus when it is educed or produced through generation, but when it is not produced but united, the union is the formal terminus; about which see the Conimbricenses where above. Finally, some say that generation agrees with creation in that it is to produce the whole, but differs precisely in that it is eductive of union.

I SAY FIRST: The total and adequate terminus of substantial generation is the composite itself, or whole not only as it says nature, but also as it says supposit, in such a way however that subsistence is not had in this whole as constituting, but as terminating the constituted nature, but it is truly intrinsically attained by generation, and not extrinsically. This conclusion is expressly that of St. Thomas, who perpetually teaches that coming to be itself just as being itself only belongs to the subsisting thing, or hypostasis as is clear in Summa Theologiae III, q. 35, a. 1, where he says: "Nativity can be attributed to something in two ways, in one way as to a subject, in another way as to a terminus: as to a subject it is attributed to that which is born, but this properly is the hypostasis not nature, since to be born is a certain being generated, just as something is generated for this that it may be, so something is born for this that it may be, but being properly is of the subsisting thing, for a form which does not subsist is said to be only because by it something is, but person and hypostasis are signified by way of subsisting." He teaches the same about creation, and about any other coming to be, that it is for the subsisting thing in Summa Theologiae I, q. 45, a. 4. The same can be seen in the Philosopher, Metaphysics VII, text 27, where he says: "That neither species comes to be, nor whatever; it is necessary to name form, which is in the sensible, nor is there generation of it, nor of what it was to be," where St. Thomas, lecture 7, says: "Because generation is of that which comes to be, it is clear that generation is not of form, but of the composite, nor again is what it was to be of the generated thing generated except per accidens, but form, and what it was to be is what comes to be in another, that is, in matter not per se." Thus St. Thomas. From which words it is gathered that if that which is generated as total terminus, and as quod is not form alone, nor quiddity, or what it was to be, for this is the total form itself, or nature, because partial form alone is not quiddity and nature, but its principle, it remains that the total terminus is the supposit itself. Hence it is also clear that those who say that he did not recognize supposit, or person in substances, have not read, or have not noticed the words of Aristotle, for thus he says: "That what comes to be and is generated is not form nor quiddity but composite," and by the name of form is understood partial form, but by the name of quiddity, or nature is understood total form, it remains that by the name of composite is understood the supposit itself, for this alone is what is distinguished from nature, or total form. And St. Thomas often observes this place of the Philosopher to prove that forms do not come to be, but the composite itself, or subsisting thing, as in Summa Theologiae I, q. 65, a. 4, and other places.

The foundation of the conclusion is taken from the very doctrine of St. Thomas, because generation per se first tends to constitute a thing in being integrally and perfectly, but the nature of a thing does not have whole being unless it has it subsisting, and per se, because this is proper to substance, that it have terminated and subsisting being; indeed it is repugnant that it have being, unless either subsisting in itself, or united to another subsisting thing, just as human nature is in Christ, therefore generation as long as it does not give such being thus subsisting in itself, or in another is defective, and not integral, nor is it thought to give its whole effect, therefore then is the adequate terminus in which generation stops, where being generated itself is terminated and stops but it stops in the subsisting thing, therefore the subsisting thing in such a nature is the total terminus, and as quod of generation. And it is confirmed, because it pertains to the generator not only to give form, but consequences to form, such as proper passions, but subsistence is more intimate than passions, because these are accidents and pertain to the ornament or operation of substance, but substance is its intrinsic and substantial terminus; hence union to the subsistence of Christ was substantial in human nature, therefore it pertains more to the generator to give that, than proper passions. I omit that according to St. Thomas existence is proper to hypostasis or supposit as quod, but to nature as quo, as he teaches in Summa Theologiae III, q. 17, a. 1, and we showed in Physics q. 7, therefore if generation tends to give being, its total terminus, and as quod will be that to which being belongs as quod, namely the subsisting supposit itself.

And from this is deduced the last part of the conclusion, namely that subsistence itself or supposit pertains to the intrinsic terminus of generation, and not only to the extrinsic and resulting, as the Conimbricenses seem to think in the question cited above, art. 4, concl. 1 and others, because that is called intrinsic terminus, which is directly and per se attained by the action not secondarily and mediately, and by presupposing another primary; but the subsisting thing cannot be a mediate and secondary terminus, supposing another primary produced, because complete and integral being is first and per se found in the subsisting thing itself, not before subsistence, therefore the thing as subsisting, and subsistence itself also enters into the intrinsic terminus of generation as pertaining to integrating and completing the generated thing, not as a constitutive predicate, but as the intrinsic terminus of the generated thing with respect to its being.

I SAY SECONDLY: The formal terminus of generation is not the union, but the constitutive form of the generated thing. But union insofar as it says application and conjunction of extremes is not a terminus, but an application, but that which results from such union, if it is taken by way of supposit, is the formal terminus as total form. This conclusion which is common among Thomists, is evident from St. Thomas himself in Summa Theologiae III, q. 35, cited above, where after he said that nativity and generation are attributed as to a subject to the person itself, and not to nature, he adds: "That as to a terminus, nativity is attributed to nature, for the terminus of generation, of any nativity, is form, but nature is signified by way of form." Where St. Thomas speaks of the formal terminus, not of the total, which is the subject, about which he had already said that it is person. And similarly it can be seen in III Sentences, dist. 8, q. 1, a. 2, and best in I Sentences, dist. 5, q. 3, a. 1, where he says: "The terminus of generation in creatures can be taken in two ways, just as also the principle, for the generator itself is called the principle of generation, and to this principle corresponds as terminus the generated itself. The principle of generation is also called that from which generation begins, and in this way the principle or beginning of generation is the privation of the form to be induced, and to this principle the opposite terminus is the form induced through generation." Thus St. Thomas.

And the foundation is gathered, because to the adequate and total terminus of some action that is the formal terminus which in the terminus itself is had as form which per se specifies the action, and assimilates the generated to the generator itself, for these are the functions of the formal terminus, namely to formalize the total terminus itself, which indeed is done by specifying, or constituting, and assimilating the generated itself to the generating thing. But it is clear that the form of the generated terminus is not the union itself, but something united, for union is had as communication and application, by which the extremes are communicated, therefore the constituting form ought to be the communicated and united extreme, for this is the ultimate which the generator intends, for it intends to assimilate the generated to itself in form, and once assimilation is posited it ceases; but it does not cease in union, because union is application that form may be rendered united, therefore the united form is had more as formal terminus than the conjoining union. And it is confirmed, because if that union, by which that form is united, were applied to another it would unite it to matter in the same way, therefore the proper distinctive and formal constitutive of this generation is not union on account of union, but on account of the united form. Hence also when form is not produced through generation, but is introduced and united, and if union alone is produced, still it is not produced as formally constituting, but as formally communicating and applying that which constitutes as form.

From which it is gathered that when the formal terminus is assigned, and is designated by reason of some formality, if "formal" is taken for communicating and uniting, thus union is the formal terminus, if it is taken for the formality terminating and constituting, and assimilating the generated to the generator, thus the formal terminus is not union, but the united form; but it is clear that judgment must be made about the formal terminus chiefly according as it terminates rather than according as it mediates. It is indeed true that form cannot formally constitute except by connoting and supposing union as a condition and application, but the united form itself is had as constituting. And thus also, as we said above, art. 3 from Cajetan Summa Theologiae I, q. 118, a. 1, in human generation, although form is not produced but united, nevertheless not union alone, but also the united form itself is attained by generation not according to the being of form in itself, but according to being-in, in such a way however that union is had as condition, and united form as formally constituting and terminating.

Arguments are solved.

First, it is argued against the first conclusion: Because true generation is preserved without the supposit being produced or attained, and similarly without nature being produced, therefore neither is the supposit the total terminus of generation, nor nature the formal terminus. The antecedent is clear, both in generation, because the Blessed Virgin generated Christ, which was true generation, since she was truly his mother, and yet she does not attain the supposit, either by producing it, because in Christ there was not a created supposit, or by uniting it to nature, because this union was not made by the action of the Virgin, but by the immediate assumption of God; and also because the supposit results once nature is posited as a mode or terminus adjoined to it. Hence if now humanity were dismissed from the Word, a created subsistence would result anew, therefore it supposes the terminus of generation entirely produced through action, since what remains is only made through resultance therefore the supposit does not pertain to the intrinsic terminus of generation, as it is action, but once the terminus of action is posited it results; and finally, because St. Thomas in no way attributes to the supposit itself the notion of terminus, but of subject of generation, but the notion of terminus to nature itself, as is clear in Summa Theologiae III, q. 3, a. 1, because nature, which consists of the union of matter and form is integral and total substance, therefore of itself it terminates total action, and thus to be the total producible terminus of generation, it does not need anything else, but nevertheless because that nature is terminated by the supposit, and in it as in a subject, therefore the supposit is said to be the subject of generation not the terminus, because it does not terminate the action, but is subjected or supposed to nature terminating.

As for the second part, the antecedent is proved in Divine generation, in which the total terminus is the proceeding Person, but nature does not have the notion of terminus even formal, otherwise it would be distinguished from the principle from which it proceeds, and thus there would not be only one nature in three Persons.

It is answered by denying the antecedent. To the first proof it is answered that some think that the action of the Blessed Virgin in the production itself of humanity, and its existence, so stops, that she is not called Mother of God, that is, of the person subsisting in that humanity, except materially, and secondarily, and per accidens, just as if now

God were to assume my humanity having destroyed its subsistence, the mother who generated me would be called materially and per accidens mother of God, because she would be mother of the man whose nature was assumed by God, thus by producing humanity existing in itself, and terminating the generation of the Virgin she is called Mother of God, because she is mother of the humanity, which by another action not pertaining to the Virgin was assumed by God. For if the action of the generator does not touch the supposit, but stops in the being of nature whatever supposit is applied to it will be had materially: and thus the Blessed Virgin formally and per se will not be called Mother of God.

Nevertheless, in the opinion of St. Thomas the Blessed Virgin most properly and formally is the true Mother of God, no less than the mother of Peter is formally mother of that man. For in the generation of men, the generator does not produce the form, nor its existence, or subsistence, but the rational form subsisting in itself is created by God, and infused, but the generator unites matter to that form, and thus that being of the soul, which is made by God is communicated by the generator to the body itself, and there is not another being in the body itself, and in the whole composite, than the being itself of the soul thus communicated, because in the composite itself according to St. Thomas there is given only one being which indeed comes from the form as from the principle quo, but belongs to the composite, or supposit as quod. Hence since the rational soul has being existing per se, or subsisting, although communicable to matter, therefore the generation of man is most formally said to attain the person, insofar as this very being of the soul, which is communicated to the whole composite, or person, is communicated to the body by the generator, and makes the integral man. And thus St. Thomas says in Summa Theologiae I-II, q. 4, a. 5, ad 2: "That to the human soul remains the being of the composite after the destruction of the body, and this because the same is the being of form, and matter, and this same is the being of the composite." Similarly therefore in Christ there is only one being, which is of the person or supposit and is communicated to nature, as the same St. Thomas teaches in Summa Theologiae III, q. 17, a. 2. But nevertheless this being of the Word, or subsistence, communicated in a certain order, was first to the soul by priority of nature, then to the body, because by nature it assumed the soul before the body, and through the soul the body, as St. Thomas teaches in Summa Theologiae III, q. 6, a. 1, so that in the very creation of the soul at the same time the assumption of the Word mixed itself in, impeding the proper subsistence and existence of the soul, and subrogating its own through assumption. Therefore when in that point the generative action of the Blessed Virgin attained the union of the formed body to the soul, which God was infusing, it assumed that very being, and subsistence, which it found in the soul it communicated to the body. And thus just as ordinary generative action communicates that proper and natural being of the soul to the body, and for this reason is most formally called mother of man, and of the person subsisting in humanity, so the generation of the Virgin communicated the being and subsistence of the Word, which it found in the assumed soul, to the body, and thus most formally is called mother of that man, or Divine Person, as subsisting in that humanity consisting of body and soul. Nor yet did the Blessed Virgin efficiently attain the assumption itself even instrumentally, because this with the very creation of the soul was immediately made by God, but the Blessed Virgin, the soul by priority of nature assumed by God, she by generation itself communicated to the body, just as later in the resurrection by uniting the soul to the body without new assumption again God man resulted, for the assumption of the soul is virtually the assumption of the body because the soul is of itself communicable to the body.

But if you say: If the whole subsistence of the Word, and its being was conferred on the soul, and through the soul to the flesh, therefore the soul being separated in death, the flesh remained without the subsistence of the Word, just as the flesh of a dead man remains without the subsistence of the soul which is separated. But this is erroneous, otherwise the Son of God would not have been buried, when his body was buried, it is answered from St. Thomas in Summa Theologiae III, q. 50, a. 1, ad 2, where he solves this argument: "That the Word of God is said to be united to flesh through the soul, insofar as flesh through the soul pertains to human nature, which the Son of God intended to assume, not however so that it is a medium as it were binding the united things. But flesh has from the soul, that it pertains to human nature even after the soul is separated from it, insofar as, namely in dead flesh there remains from Divine ordination a certain order to resurrection, and therefore the union of Divinity to flesh is not taken away." Thus St. Thomas from whose words it is clear that flesh in Christ remained united to the Word, not because they have a distinct subsistence, which is supplied to it separately from form, nor because the subsistence of the soul would be communicated to the body after death, but because dead flesh also pertains to human nature on account of the order to resurrection, and whatever pertains to human nature was not dismissed by the Word, therefore that body remained assumed not under the form of soul, nor separated from all form, but under the form of corpse, which was assumed for a time, insofar as it was required for the constitution of dead human body, which was still ordered to human nature, by reason of resurrection.

To the second proof it is answered, that the supposit does not result as a passion, but as the terminus of nature altogether prerequisite to its existence, hence just as existence does not result, but is attained by action, so also subsistence, which precedes it, and although existence would precede, still it would be attained intrinsically by the action itself, because before subsistence existence itself is not terminated, and complete, and thus neither is the action constituting the produced thing in the notion of state of the whole, but the whole itself is attained by action. But what result are accidents, which neither pertain to the whole itself, as parts, nor as modes or total termini like subsistence.

To the third instance it is said, that St. Thomas attributes the notion of terminus to nature, and the notion of subject to hypostasis, or supposit, because it sustains, and is subjected to nature, and thus by the name of terminus absolutely said he understands the formal terminus as specified, to which it is tended, but by the name of subject he understands the total terminus, because the supposit is not the subject from which generation is made (for that is prime matter) but what is born through generation.

To the second part of the argument it is answered, that Divinity is not the produced or proceeding terminus, but communicated, and thus is the formal terminus of the generation of the Word, for it is that, in which it is assimilated to its principle, and that generation, insofar as it is assimilative is communicative of the nature of the Father, and thus nature, as nature, is its formal terminus communicated, not produced; but in the procession of the Holy Spirit nature as nature is not the formal terminus even communicated, but identical, but infinite love is the formal terminus, but the produced terminus is the subsisting person, which is also called notional love.

Secondly, it is argued to prove that union, not form, is the formal terminus, because it is always what is produced anew, but form is not always, as in the generation of men, but the formal terminus must be produced anew, because what is not produced does not terminate action, because it does not receive being, but new action must give new being, indeed when form is educed it is not produced, except as educed, and consequently as united to the subject, and by this it is distinguished from creative production therefore the formal specific notion of generation is the terminus as united, since by this it is formally and ultimately distinguished from creation. Finally, from the sole variation of union we see species of action varied, as when the rational soul is united through generation, or reunited through resurrection, there is no variation in form, but in the union of diverse form therefore diverse union will be the diverse specifying notion, and formal terminus, for this is what specifies.

To the first part of the argument it is answered, that it is not necessary for the formal terminus to be produced anew in its entity, it suffices that in its participation, by which it specifies, for it is proper to the formal terminus to specify, and formalize what is produced, but for this it does not contribute per se, that the entity of the specifying form be made anew, but it suffices, that it itself be newly communicated to the specified, and thus communication or union be made anew, yet that union is not the formal terminus, that is, formalizing, and specifying, but applying, and uniting, hence one thing is the formal notion of terminus, another the notion of newly produced in the thing which is generated; for the total terminus to which it belongs to be, and to be produced as quod, is produced anew, but form to which it belongs to be as quo, it is not necessary that it be produced, but it suffices, that it be communicated, and thus specify, and formalize; but union itself is not the formal terminus, that is, form giving specification, but application of the formal terminus. Which doctrine is from St. Thomas in De Potentia q. 3, a. 9, ad 6, ad 20 and 21 and is noted by Cajetan in Summa Theologiae I, q. 118, a. 1.

To the second part of the argument it is answered, that generation is not distinguished specifically from creation, because form is produced as united, when it is educed, for also in creation when the whole itself is produced parts are produced as united, but because it pertains to creation to produce the whole presupposing nothing of the parts, but making all anew, and from nothing both matter, and form, therefore it is distinguished from eduction which produces the whole presupposing one part, namely matter, from whose transmutation form is educed; which applied to matter constitutes the whole, and thus through eduction the whole is not so much made, as composed, but in creation it is absolutely made. Hence they are not distinguished formally by reason of union, but by reason of the formal terminus, which in creation is the whole being from nothing, in generation form constituting such being from presupposed subject, and thus also in creation matter pertains to its formal terminus, because it pertains to the notion of whole being.

To the last part of the argument it is answered by denying, that diverse union precisely is diverse formal terminus in substantial action, such as resurrection, and generation; for of both union is produced, and thus diversity of these actions cannot be taken from it alone, but is taken from form itself, as it stands under diverse notion, and mode of communicating itself to matter, for every generation requires diverse transmutation, as communicating soul to body, than resurrection, which without such formation, and dispositions, but presupposing prior union to have been corrupted, unites soul to body, and thus regards form, as reunited, not as precisely united; similarly also the formation of man from earth, as in Adam, was an action distinct from generation, not on account of diverse union, as formal terminus, since in both union was produced, but on account of form itself communicated under diverse mode of transmutation, and thus founding diverse formality or respect of terminating action, insofar as it produces diverse mutations in matter, that it may generate, or that it may resuscitate, or that it may form from earth; but the formal terminus is taken from form with respect to the way, and to the transmutations, by which it is made; for these also are produced through action, as leading to the terminus. But whether in accidental action, e.g. in intension, union alone is produced anew, or indeed some formal perfection which is added to quality will be inquired below in q. 5.

ARTICLE V.
What is the subject of generation, and on its distinction from creation?

Three subjects, or three notions of subject, can be distinguished in generation. For there is the subject of mutation, which can more properly be called the object, because it is that to which generation tends; finally there is the subject of denomination, namely the thing which is denominated as generated. In generation, therefore, matter is changed from privation to form, but it is not denominated as produced, nor as generated. But the form which is educed, or the composite which newly receives being, is said to be produced. But the supposit itself, which as generated regards the generator itself, is denominated as generated. Among these subjects, we inquire which of them is the subject of inhesion to which generation inheres. There is difficulty from the difference between alteration and generation, because alteration both on its own part, and on the part of its terminus, which is quality, supposes for a subject complete substance, and in act, which is capable of accidents, but generative action supposes only prime matter, which is not capable of accident before it has substantial form, but this is produced through generation itself, therefore it is not supposed for it as subject. But on the other hand prime matter is the subject of mutation, because it alone and not the whole composite is what is transmuted from one form to another, and substantial form is received in it, and is immediately united to it, therefore generation ought to be in it, because action is in that subject in which its terminus is, for action or mutation is not received separately from the terminus. And the authorities of St. Thomas and the Philosopher to be adduced later tend to the same.

I SAY THEREFORE FIRST: The subject of mutation in substantial generation is prime matter alone, but of inhesion it is not prime matter alone, nor prime matter as subject to the form of corporeity, but the whole composite, which is generated through it. About the first part of the conclusion there can be no doubt, and St. Thomas speaks in this sense when he assigns prime matter as the subject of generation, and not substance in act, for he expressly speaks of generation as mutation, and of the subject of mutation, as is clear in De Generatione I, lect. 10, at the end, where he says: "He compares the aforesaid transmutations, according to subject, which is only in potency, and he says that prime matter is the most proper subject susceptible of generation and corruption." He speaks in the same way in Summa Theologiae I, q. 45, a. 1, ad 2, speaking only of mutation, and more clearly in De Potentia q. 3, a. 3, ad 4, where he says: "That in generation, there is both mutation and relation, by which the generated is referred to the generator. By reason of mutation therefore it does not have for subject the generated itself, but its matter, but by reason of relation it has the generated itself for subject. But in creation there is relation, but not mutation, and therefore it is not similar." But he had said in the solution to the third immediately before, that that relation of creation as it is an accident inheres in the subject and is posterior to it, which will be proved generally of every accident below in q. 9, namely that the subject of inhesion as quod is the composite.

But the reason for this first part is, because that is the subject of mutation, or motion, which is the subject of the terminus of motion, or of the termini, between which motion occurs, but it is clear that the termini, between which generation occurs, as it is mutation, are form, and privation, but both have prime matter for subject, for it is deprived of substantial form, and it is also immediately informed by substantial form, therefore it is the subject of this mutation, which is generation; hence in Physics three principles are assigned, namely matter, form, and privation for the natural thing itself in becoming, or for generation, but matter is not a principle of generation, except as subject of such mutation, because the subject of mutation ought to be a principle of the movable thing, not only in fact, but also in becoming; and in generation itself, since in this it is distinguished from creation, that it proceeds from the transmutation of some subject, therefore it is necessary that matter be a principle of generation as subject, but not the composite itself, because this is principiated and not principle.

The second part of the conclusion, namely that prime matter, as it is under the form of corporeity, is not the subject of inhesion of generation itself, is manifestly clear supposing what will be expounded more broadly in the books on the Soul, that in any substantial composite there is only one substantial form, which gives all specific and generic grades, but not one form gives the grade of corporeity, another of living, another of sensible, as St. Thomas excellently pursues in De Generatione, lect. 10, at the end, and we will prove in q. 1 on the Soul. Which being supposed it rightly follows, that the subject of generation is not prime matter, as it is under the form of corporeity. Because no substantial form so accompanies matter, that it is never stripped of it, but by this very fact that one substantial form is corrupted all grades are corrupted, because all those are the same and one entity of form, therefore the form being corrupted, matter does not remain under some form, or grade of corporeity for receiving form and newly generated, but matter alone and nude receives it, and form affords to matter every grade not only first and remote, as is the grade of corporeity, but also ultimate and specific, and thus takes away every grade, which the corrupted form afforded.

Concerning the third part of the conclusion, namely that the subject of inhesion is the whole composite itself taking generation, not for the preceding alteration itself, which it is clear is received in the preceding composite, which is corrupted: but taking generation for that substantial action distinct from alteration as we now suppose to be distinguished from what was said above in article three. About this there is greater difficulty even among Thomists, for many think its subject of inhesion to be prime matter itself, as Cajetan seems to think in Summa Theologiae III, q. 35, a. 1, and others whom the Carmelite Course cites and follows here in disp. 2, q. 5. But others with Master Bannez in De Generatione I, ch. 4, q. 11, say the whole composite is the subject of inhesion with respect to generation itself.

We say therefore, that supposing two principles, one admitted and proved by us above, that generation is an action distinct from alteration, and is not pure and nude resultance, the other to be proved and admitted below, namely that prime matter immediately and per se is not capable of the inherence of accident, so that accident itself is sustained in being through matter, it is necessary to say, that generation insofar as it is action of the predicament of action cannot have for subject of inhesion prime matter alone. Hence the Carmelite Course where above, number 61, confesses that substantial generation taken for instantaneous mutation separately from alteration is not an accident, but something substantial as a mode. But Rubio and others admit, that some accident if it is incomplete, and as it were vital can be in matter, and not in the whole. But our opinion, which we will show below, affirms that no accident can be subjected through inherence in matter as in a subject quod, but ought to be in the whole composite, but this is either the generator itself, or what is corrupted, or what is newly generated. And indeed the generator is not the subject of generation, since it is not an immanent action, unless perhaps the subject of transient action is said to be the agent itself, but then it remains to inquire about the subject of generation, as it is passion, for in every opinion passion is not in the agent, and thus it remains to be explained whether matter is the subject of that generation thus accepted passively, or rather the composite itself. And then difficulty remains in the opinion, that action is subjectively in the patient, and not in the agent, how generation inheres in the agent, since generation is in the patient in this opinion. It is necessary therefore to assign another subject. But this cannot be the thing which is corrupted, because in the instant in which it is true to say now there is generation, it is true to say now there is not the corrupted thing, because it ceases, through first non-being, therefore that generation, which then first exists, cannot inhere in the corrupted substance itself, therefore it only remains, that it inheres in the generated substance.

But how the terminus of generation can be the subject, in which it inheres is explained from this, that the subject changed through generation itself is prime matter, which is a composing part of the terminus itself, which is the whole. Wherefore since action does not inhere except through the produced terminus, or attained by action, for action is identified with it, and the total terminus itself is composed of matter and form, or has matter as part of itself in the same the subject and terminus coincide, because the terminus is substance, and thus action does not have another subject, to which it inheres except in that, which is the total terminus with which it is identified. But the subject of accidents ought always to be distinguished from the terminus itself, when accident is produced, because through such action actual subject is not produced, but is supposed; but through substantial generation actual subject is produced which is the composite. And although prime matter is supposed, which is a principle of receiving even accidents themselves, nevertheless it is not a principle quod receiving them, but a principle quo, that is, the reason by which the composite itself, as subject quod can receive accidents, nor is it a principle of sustaining accidents themselves in being, because the principle sustaining in being, is supposed to have existence, which it affords to accidents; but prime matter does not have it except through form, as we showed in Physics q. 3, and above art. 1, yet matter has to be subject with respect to substantial form, because form is not sustained in matter by presupposing being, but is received that from it and matter the composite may be constituted, which is having being; and thus St. Thomas distinguishes between subject and matter in Opusculum 31, at the beginning. Since therefore generation, insofar as it is action, is an accident, it is necessary that for subject of inhesion, and sustentation it have the composite, and not prime matter alone, although that is the principle quo of receiving, and subject also of mutation, as has been said.

I SAY SECONDLY: Generation and creation, both complete and adequate, which is simply called creation, and inadequate and incomplete, which is called concreation, such as the production of prime matter, or the production of form dependent on matter when it is done through creation, differ both on the part of the formal terminus and on the part of the mode of producing, although in the total terminus materially taken both generation and complete creation agree. This conclusion is taken from the doctrine of St. Thomas in Summa Theologiae I, q. 45, a. 2 and Metaphysics IV, and De Potentia q. 3, a. 1 and 2.

For its explanation two things must be noted. First, that although creation is a single and indivisible action attaining the whole itself, and producing parts, nevertheless not all things are equally denominated to be created, but to the whole itself it belongs to be created as to a subsisting thing, and having being as quod, but to parts it belongs to be created, as to principles constituting that whole, and having being not as quod but as quo. Hence arises that distinction of creation, that one is adequate and incomplete, for the first is said with respect to the whole, which is attained by creation, as absolutely and subsistently having being. But the second with respect to parts which are attained, as having being in another and with another on which they depend and to which they are subject that they may be, and therefore are said to be created. Which doctrine is of St. Thomas who in many places teaches that only subsisting things or the whole itself and composite are properly created, but matter and form are not properly created, or made, but concreated, as is clear in Summa Theologiae I, q. 45, a. 4 and q. 44, a. 2 and q. 7, a. 2, ad 3, and De Potentia q. 3, a. 1, ad 1.

The second which we suppose is, that both creation and substantial generation agree in this, that it is to produce the whole composite, or to make a subsisting and complete thing to which being belongs per se, but they differ in that generation supposes those things of which this whole must consist, either all, or at least prime matter, for the generation of man makes neither matter, nor form, but joins both, but other generations at least suppose prime matter, although they educe and produce form. But creation so produces the whole composite, that it supposes nothing of those things from which it coalesces, whether parts, or whole, but whatever of entity is in the thing it makes, and thus creation is of such power, that by force of its formal notion it has to attain in the created thing every notion of being, whether it be matter, or form, or potency, or act. Wherefore generation must necessarily suppose creation, nor could things first begin through motion; in which some ancient Philosophers were mistaken, and Aristotle himself, who thinking that there was no other mode of producing things, than through motion and generation, fell into that inconvenience of the eternity of the world, not finding a beginning, by which things were first produced, if all are produced through motion, for in this way something was always supposed, from which mutation, or motion would be made, for if something were produced not supposing another from which it would be made, or would be produced by mutation, because it would be made from nothing and not from a subject. Therefore that we may not posit an infinite process, and eternity of generations in motions, it is necessary to arrive at the production of matter not from another subject, but from nothing, and consequently through creation. And because matter is not alone, and without form, but under it and dependent on it, as in fact it was when in the beginning God created heaven and earth, therefore creation is always of subsisting things, and composites, but of part it is concreation.

From which the posited conclusion can be clear, and the difference between creation and generation can be declared, both on the part of the formal terminus, and on the part of the mode of proceeding. On the part indeed of the formal terminus, because generation has for formal terminus only specifying form, whether as educed, or as united, but creation has for formal terminus the whole notion of being, which is found in the composite whether on the part of form, or on the part of matter, and thus there the adequate and formal terminus coincide. Hence St. Thomas in Summa Theologiae I, q. 45, a. 4, ad 1, explaining that axiom from the book on causes "the first of created things is being", says that "being" does not import created substance, but imports the proper notion of the object of creation, for from this something is said to be created, because it is being not from this, that it is this being, since creation is the emanation of whole being from universal being. Therefore the formal notion, or terminus of creation is not form, which informs and gives species to nature, but the whole notion of being, which is found in such a thing, and thus on the part of the formal terminus generation and creation differ greatly, since what is total in generation is formal in creation.

But on the part of diverse mode of proceeding generation and creation differ, both on the part of the terminus ad quem, and on the part of the terminus a quo; on the part indeed of the terminus ad quem, because creation makes the whole itself to be produced simply producing all things which are in it, but generation makes the whole by uniting parts, not producing, or at least not all, because it presupposes matter. On the part of the terminus a quo, because creation is from pure negation, or from nothing, because it supposes no subject, but generation from privation, because it supposes a subject lacking form.

Is creation of the same nature in simple and composite things?

From these it is deduced that creation is of the same nature whether it produces a simple entity, such as an Angel, or a composite one, such as heaven or earth. The opposite is held by Fr. Vazquez in Volume II, Part 1, disp. 164, ch. 4, n. 17, and others who follow him, who says first that creation is not only of subsistents simply and totally, but it suffices that it be the production of something which by its own nature can subsist and not be in another, or depend on it, like the rational soul. Secondly, he adds that in any composite thing there are individual productions of individual parts, and another of the whole, because it consists of composition, but such a composite according to that notion by which it is distinguished from the parts cannot be created of its being, because it is from something, namely from the parts, which precede by priority of nature, therefore it is not from nothing, as is required for creation, for that nothing precede in time is not required, as is clear if things were created from eternity, for they would be made by true creation, and yet nothing would have preceded in time. He adds thirdly that matter is created by true and proper creation, because it is made from nothing, and although it depends on form, nevertheless not according to its entity, otherwise when form changed it would change in being and entity; indeed any agent introducing form into matter would make it exist, because producing form not only makes it be, but also that through it it has being, for it is the same to produce form and its formal effect. And then if God conserves matter through form as a principle, and matter is from it, it will not be created by God, whenever it is produced as conjoined to form, and thus no composite would be made through creation except man, because every other according to form is not educed from matter, according to the notion of composite it is from parts, not from nothing, according to matter it is from form, since it becomes dependent on it. Finally, he likens the creation of matter to the creation of the rational soul, because that naturally happens with conjunction to form, this naturally with infusion to matter, although by absolute power each can be made separately.

NEVERTHELESS IT MUST BE SAID: In the creation by which composite things are created, several actions are not implied by which individual parts are partially created, and another which produces the whole from the parts, but by one action the whole and parts are produced, and thus creation is of the same nature for a simple total thing and for a composite thing, because in both being insofar as it is being is intended, but it is material whether it is composed of parts or not. Hence St. Thomas perpetually excludes from the property of creation matter and form and parts, which he says are only concreated, but the whole subsistent itself is properly created, as can be seen in De Potentia q. 3, a. 1, ad 12, and Summa Theologiae I, q. 7, a. 2, ad 3, where he expressly affirms that matter and form are not properly made, nor created, but concreated; but especially speaking about matter, which Vazquez says is created, but the composite is not, he is diametrically opposed to St. Thomas who in Summa Theologiae I, q. 44, a. 2, posing that argument that matter is not created, because it does not have being in act, but through creation only actual being is made, responds: "That the argument proves that matter is not created alone but under form, because even that which holds itself on the part of potency in the creature is from God." But in q. 45, a. 4, posing the opposite argument, namely that what is properly produced through first emanation is what is supposed in the second, but what is supposed in generation is matter, therefore matter is properly created, and not the composite, which certainly is the foundation of Vazquez, St. Thomas responds with the same solution as to the argument previously posed: "Namely that reason does not prove that matter alone is created, but that matter is not except from creation, for creation is the production of whole being, and not only of matter." Therefore St. Thomas thinks that that being of the whole, as it is distinguished from the notion of matter partially taken terminates creation, and thus it is false to say that the composite cannot be created, but only that part which is not from another, as matter is.

But the foundation of this, from which also the deception of the opposite opinion is revealed, is in this, that two things concur for creation, one on the part of the mode of producing, namely that it is not made from another presupposed, but from nothing; the other on the part of the produced terminus, namely that the whole notion of being, or the whole and integral being of some thing is produced; hence it necessarily requires that the being of the thing is not made from the transmutation of a part, and the conjunction of them into one, for that properly pertains to generation, yet creation does not exclude that it makes something from its parts, so that it gives to the whole itself all its constituents, and parts although it does not presuppose any as from whose transmutation it arrives at the whole itself. And in this the foundation of Vazquez greatly equivocates and limps, while it confuses to be made from something, as from a constituting part only, or to be made from something, as from a principle of transmutation, which is the principle of becoming itself. For that something be made, as consisting of something as from a part or constituting predicate of itself, does not take away that it be made simply from nothing, if otherwise it presupposes no principle, through whose transmutation it is made, for this is what alone is opposed to creation itself, as it is from nothing. The manifest reason of which is, because in creation to be made from nothing holds itself on the part of the terminus a quo, but in the composite to consist of parts, and to be from them as from constituents, holds itself only on the part of the terminus ad quem, since they pertain to the constitutive of such a terminus, therefore this, which is to be from something as from a constituting part, is not opposed to this, which is to be from nothing simply as from a terminus a quo, therefore neither is it opposed to creation itself, because creation is preserved in this precisely, that it is from nothing as from a terminus a quo, and consequently not that it presupposes something as a transmuted subject; but if the subject itself is made, as it is a constitutive part of the whole, the whole itself is made more than the part, since not from the presupposition of the part, as to be transmuted for this that the whole be made, but without such transmutation the whole itself is made. But if it does not presuppose a part, that from its transmutation the whole be made, indeed it makes the part for the sake of the whole itself, and as something less than the whole itself it makes it, therefore it principally regards the whole, and less principally the part, therefore directly through creation the composite itself is made, but it only makes the part, as constituting the whole, but not the part, which is matter, but that is concreated as less principal to the creation of the whole, to which directly being belongs as to a subsisting thing as quod, and consequently to be created as quod, because creation directly regards being. And so to be made from something as from a constituting part and pertaining to the being of the thing, does not take away creation, nor constitute generation, but to be made from something as from a presupposed principle, through whose transmutation the thing itself is made, this constitutes generation, because generation is transmutation.

You will say St. Thomas in II Sentences, dist. 1, q. 1, a. 3 says: "That being is through creation, and other superadded perfections through information and in composites especially that being of the first part, namely of matter," therefore St. Thomas presupposes that creation first and directly terminates in matter, and being belongs to it. It is answered that that being of the first part, namely of matter is the being of potency, and is said to be especially through creation from that part, by which it does not presuppose any subject from which it is made, not from that part, by which it has being absolutely, and simply, for this it does not have except dependently on form, and for this reason it is said to be concreated, as is clear from the places of St. Thomas, namely by reason of being had through form, not absolutely in itself.

To the instances adduced by Fr. Vazquez it is answered to that which he says the composite is made from something, namely from parts, and thus is not made from nothing we have already answered it is not made from something as a principle of transmutation, but from something, as intrinsically constituting, which does not take away creation, nor the composite being made from nothing as from a terminus a quo since the constituting part only holds itself on the part of the terminus ad quem.

To the instances, which he brings to prove that matter is created first and per se, it is answered that matter is made from nothing not as having being, but as a part in potency to the form of a thing having being, but it is not inconvenient, that matter be changed in actual being, just as it is changed in information passing from privation to act and from one form to another, and consequently from one being to another, which is not to be corrupted, except per accidens, and as to succession in being not as to total definition, because the entity itself of matter is capable of existing through whatever form from these, which it can receive, hence to be now under one form now under another, is not totally to cease, and to lose being, but to transmute it leaving one inadequate mode of being, and acquiring another within the sphere of its forms, from which it has being, just as if my humanity were now assumed by the Divine Person it would receive another being, and subsist yet nevertheless it would not be corrupted, because it would so put off its proper being, that another is subrogated in place of it. And in one word, to lose being adequately, and totally is to be corrupted, to lose being inadequately, and with subrogation, and succession of another, is not to cease, nor to be corrupted. Nor similarly is the generator, which induces form in matter said to produce, or generate matter, although it makes it exist, for it does not make matter as to its potential entity, which is the proper entity of matter, nor does it educe from any subject, as is required for generation, but by educing form from it, it transmutes its being, and so it does not make it exist absolutely, because the entity of matter is not limited to the being of one form, but is capable of having being under whatever form and therefore transmuting forms in matter does not give matter being absolutely, but transmutatively from one form to another, just as existing in that however much surfaces are changed, is said to remain in the same place, because it has the same effect of existing in place, coming from diverse surfaces successively, of which one is subrogated to another in locating; and an animal is said to have the same body, although diverse parts succeed, because they succeed under the same form, and disposition, and order. Thus although diverse beings succeed inadequately to matter from diverse forms, yet because they succeed in order to conserving the same potential entity of matter, which is capable of all forms, therefore the same entity of matter remains under diverse succession of existence, and being of forms, and therefore the generator of such forms, although it communicates to matter the formal effect, and being of form nevertheless is not said to corrupt or generate matter, because it does not first, and adequately give being, but conserves its entity in succession of diverse being: just as on the contrary he who successively aggregates diverse parts of matter to an animal, although he materially attributes a diverse body, nevertheless is not said to generate it, but to conserve under the same body. Nor yet, because matter is made by God under form, is it said to be made from it, as from a subject, but dependently on it as on an act. Wherefore in no way can the creation of matter be likened to the creation of the rational soul, because the soul is made as having being in itself, and subsisting independently of matter although communicably to matter and because communicably not suppositally, but matter is not made, as having being independently of form, but as receiving from form.

To the reason for doubting, from the beginning to prove, that the subject of generation, as to inhesion is not the generated thing, it is answered from what has been said, that the subject of mutation is not the subject of inhesion under the same formality, and notion; for it is the subject of mutation, insofar as it is in potency to some form, but it is of inhesion not only as it receives, but as it is in act giving being, and sustaining in being the inhering form. Hence since by reason of matter substance is in potency to substantial forms, by reason of the whole it has existence, so that matter itself according to itself does not have it but as in the whole, hence it happens that by reason of itself it is the subject of mutation, but is not the subject of inhesion except through the whole, in which alone existence and the notion of sustaining in being is had, as we will say below in question nine, but this is not the thing which is corrupted, because it ceases to be, therefore the thing which is generated.

But you will insist: For the subject of the educed or united form not only as to mutation, but also as to information is matter, and not the composite, therefore also the subject of eduction, or generation. The antecedent is certain, because that which is informable by substantial form is nothing but prime matter, but that is called the subject of form, which is informable by it. The consequence is held, because action is identified with the terminus, therefore what is the subject of the terminus or form will be the subject of action to it. It is confirmed, because in other motions action is in that subject where the terminus is, because the subject in which mutation inheres ought to be common to both termini of mutation, therefore since the subject of both termini or form which is generated, is prime matter, for that receives both forms, that also ought to be the subject of generation, as to inhesion. Finally, the authorities of St. Thomas tend to this as in De Generatione I, lect. 10, and Metaphysics VIII, lect. 1 and Summa Theologiae I, q. 45, a. 1, ad 2, and De Potentia q. 3, a. 3, ad 4, in II Sentences, dist. 12, q. 1, ad 2. Where he perpetually assigns for the proper subject susceptible of generation, and corruption prime matter.

It is answered by denying the consequence, as to the subject of inhesion, and to the proof it is answered, that action is identified with form, I distinguish: inadequately as with the formal terminus, I concede; adequately and as with the total terminus, I deny. And so the argument can be turned back, for generation is identified with the total terminus, the total terminus is the composite, therefore generation is in the composite, and not in matter alone, and thus the subject of inhesion will not be the subject of form, with which generation is identified, as with the formal terminus only, but the subject of generation as to sustentation in being will be the whole itself, to which sustentative being directly belongs, but prime matter will be the subject quo of receiving, not the subject quod of sustaining. To the confirmation it is answered, that in other mutations the subject which is changed is the composite itself, or complete being, in act, because those mutations are to accidents, and therefore the same is the subject of inhesion, and mutation. Which happens otherwise in substantial generation, which is to substantial form, where the subject of inhesion, and mutation cannot be assigned under the same formality, but the subject of inhesion is the whole itself, according as it puts on subsistent and sustaining being, but it is the subject of mutation by reason of matter, whose potentiality is changed to form. Nor is it necessary that a common subject of inhesion remain for both forms or terminus; it suffices that a common subject of mutation remain, although action inheres in the composite in which such subject of mutation is, because prime matter is not sufficient to sustain accidents, except dependently on the whole as subject quod; for this is to inhere in it, as we will say more broadly in question 9.

To the authorities of St. Thomas it is answered, he speaks of the subject of generation as it is mutation not of the subject of inhesion excluding the composite, indeed expressly in the cited place De Potentia q. 3, a. 3, ad 4, he teaches that generation according to the notion of mutation is in prime matter, but according to relation is in the composite, as we related above.

ARTICLE VI.

Whether in substantial generation there is a resolution of all form down to prime matter?

To be resolved down to prime matter is the same as prime matter being stripped of all form, both substantial and accidental, when generation occurs. And we inquire whether all form, both substantial and accidental, is removed from matter when something new is introduced, which is also usually inquired in other words, namely whether the same accidents that were in the corrupted thing remain in the generated thing. And indeed we do not treat here of the resolution of all substantial form, but we suppose that matter is totally stripped of substantial form when generation occurs, because in a composite there are not multiple substantial forms, as we will show in question 1 on the Soul, hence when one substantial form is excluded, so that another may be introduced, it is stripped of all preceding substantial form.

Therefore the difficulty is about the resolution of all accidental form. For on one side it seems that not all accidents can be corrupted, but must remain at the instant of generation, both because at that instant there must be dispositions, to render matter disposed and determined to this form rather than another, otherwise matter would remain indifferent and undetermined to such a form. Similarly, accidents which act as the power of the generator itself must remain at that instant, if the generator is not joined to it, for it is necessary that at that instant generation proceed from something effectively, not from the generator, because as we suppose it is not there, not from the power of the generator, or of heaven, or of another agent left there, because this power was subjected in the thing which is corrupted therefore if all accidents cease at that instant, that power also perishes; also because there is a special reason for some accidents which cannot at all be torn from matter, for example, quantity, which follows matter itself, just as quality follows form, and through quantity matter is rendered divided and individuated; but it is clear that at the instant of generation matter is supposed to be individual, and separated from other matters: therefore having quantity, through which this division occurs; which especially urges in man, in whom quantity cannot be subjected except in matter alone, because the form is spiritual: therefore the quantity of matter is not evacuated when man is produced, and consequently, neither do other accidents which are subjected in substance through quantity seem to be removed; finally there is difficulty about some accidents, which do not seem to belong to the generated thing, unless they remain in matter itself, just as we see in a corpse the same scar remaining, the same black color, the same signs, etc. Sometimes also heat remains within the viscera of a dead animal, which cannot be generated by its corrupter, especially when it is suffocated by water, for water cannot generate heat. Similarly if an animal is pushed upwards, that new impulse cannot be generated in the corpse, because it cannot be produced by the generator of the corpse itself, since such a generator does not have impulsive force, since it is not living, therefore these accidents are not extracted from matter itself, nor are others similar to them produced, because there is no cause by which they may be produced.

But on the other side two principles quite well known in St. Thomas oppose: namely that accidents are subjected in the whole, which perishing, the accidents perish; and second, that matter receives substantial form before accidental, therefore stripped of substantial form, all accidents previously received are stripped, otherwise some would remain received immediately in matter itself before substantial form.

Hence it is that this difficulty depends greatly on another to be treated below, in question nine, namely whether the subject of accidents is matter alone, or the composite itself. For those who hold that matter is the immediate subject of accidents, consequently say that it is not necessary in the introduction of substantial form that all accidents be resolved, and so Fr. Suarez holds this opinion, in Metaphysics disp. 14, sect. III, where he cites many from the ancients, and many are also referred for this opinion by the Conimbricenses in De Generatione ch. 4, q. 18, art. 1, especially from the

Nominalists, as Gabriel, Ockham, Gregory. It can also be seen in Murcia, disp. 1 De Generatione q. 5, and others from more recent authors.

Nevertheless the opinion of St. Thomas is: In substantial generation a resolution of accidents occurs, so that none which was in the corrupted thing is left in the generated thing, but is produced anew. This is clear from St. Thomas himself in Summa Theologiae I, q. 76, where he says: "It is impossible that any accidental disposition fall between body and soul, or between any substantial form and its matter." And he proves this there by a reason to be adduced immediately. He teaches the same in De Generatione I, lect. 10, where he says: "The same accident does not remain numerically, but what was before is corrupted per accidens by corruption of the subject, and a similar accident consequent to the newly arriving form comes." And it can also be seen in De Spiritualibus Creaturis, a. 1, ad 19, and De Anima, a. 9, ad 5. The same opinion is commonly followed by Thomists, Cajetan, Soncinas, Capreolus, Bannez, and others, whom the Conimbricenses cite and follow in De Generatione I, ch. 4, q. 18, a. 2; the Carmelites, De Generatione I, disp. 3, q. 6; Fonseca in Metaphysics V, ch. 28, q. 20, sect. 2.

The foundation is that twofold principle insinuated above. And indeed the first, namely that the whole itself, and not matter alone is the subject of accidents is to be proved by us below in question 9; let it be seen there.

The second principle, which is posited by St. Thomas where above is because matter, although it is susceptive of substantial and accidental form, nevertheless receives them in a certain order, because forms themselves are ordered among themselves, and one essentially supposes another, just as the vegetative grade supposes the sensitive, and the act of intellect supposes potency, so accidental being supposes substantial, as naturally coordinated to it, and dependent on it, but substantial being is given through substantial form.

That this may be perceived radically, a distinction must be made between accidents which are proper passions and those which are common. If they are proper accidents it is certain that they do not inhere in matter, nor are they united to it, except through the mediation of form, because they do not belong to matter except as flowing from form, but they do not flow from form except as united to matter, because they do not flow from it except as having being, but form has being when it is in matter, either because it depends on it, or because it is created in it; therefore it is prior for form to be in matter, and to give it being, than for matter to receive accidents flowing from it, and thus heat in produced fire cannot be numerically the same as was in wood, when it was being disposed for fire, because this flows from the introduced form of fire. But if accidents are common, or can be called common, because although they flow from form, they nevertheless flow according to a common grade, not according to the ultimate difference, just as quantity flows from the grade of body, which is common to all, both elements and mixtures, and concerning these accidents the same reason holds as for proper ones, because as St. Thomas notes in Summa Theologiae I, q. 76, a. 6, ad 1, just as there are given diverse grades of one and the same form, so to each genus, or grade its proper accidents follow. Wherefore these accidents as thus flowing, and consequent, necessarily suppose form in matter, that they may follow from it, but they themselves are not placed in matter prior to the form from which they follow.

But if they are common accidents, and in no way flow from form, but fortuitously belong to something, and as not per se connected, even such accidents do not remain in that matter, nor do they belong to it before form. First indeed, because those accidents do not ultimately determine matter, nor dispose it for the introduction of form, since they do not have a per se connection with form, therefore there is no reason why they should be placed in matter before the substantial form to which there is an immediate order of matter, because matter is substantial potency, and therefore immediately regards substantial act. Hence if dispositions per se required, and determining matter, are not received in it prior to form, much less accidents not per se connected. Then, because the relation of matter to substantial form is immediate, and essential, before it regards accidental form, because matter is substantial potency, whose immediate, and per se correspondent must be substantial act, for from order to act potency is denominated, and constituted. Hence not only does matter regard substantial form, as principal in order of intention, but accidental in order of execution, as Fr. Suarez says, where above number 56, but it regards substantial form as quasi immediate specifier, and so it must regard it as prior attained not only prior in intention, but also in execution, because what essentially, and primarily terminates relation is attained prior in execution, than what is secondary, because essence is constituted prior in execution, and not only in intention, than what is secondary. And especially, because accident depends on substance in existing, because substance exists per se, but accident inexists, and inheres, but what is prior in order of existing, is prior in order of execution, and not only of intention, for execution regards the being of what exists, and so since substantial form gives matter substantial being, consequently it gives being in the order, and line of existing, which is prior to the order of inhering, and consequently, since the order of execution is the order of existing, even in this order substantial form must be prior than accidental. And hence it is that because accident depends on substance according to the order of existence, it is greatly assimilated to dependence on efficient cause, insofar as efficient cause presupposes being, that effect may depend on it, and therefore God through His efficiency can supply the actual dependence of accident on sustaining substance, because in this the efficient can do the same as the sustainer. Wherefore matter, substantial form being removed, cannot retain accidents, and therefore the same accidents do not pass numerically from the corrupted to the generated thing by existing immediately in matter.

You will say: The partial being which matter has suffices for sustaining accidents, and thus although it says order first and per se to substantial form, still sufficient being remains in matter for sustaining accidents, especially those which flow from it, as quantity, or common accidents.

Secondly, it does not follow that accidents are corrupted, although form and substantial being are changed, because another equally well sustaining such accident in being is subrogated in its place, by which reason we said above that prime matter does not perish when a new form arrives, although its being is changed, because another equally well providing being to matter is subrogated.

To the first it is answered, that partial being of matter does not suffice for sustaining accidents, both because matter does not have partial being, but only receives being from form, because form gives substantial being, and thus the first being which underlies others, otherwise it would not be substantial, therefore it does not suppose another prior in matter; and because granted that it had partial being, still it cannot sustain accidents except dependently on the whole, or composite as existing as quod, hence matter itself is only a principle of sustaining accidents as quo, but the principle quod being removed or destroyed, and another not being subrogated supplying in all things its role, the principle quo neither acts nor receives. But it is false that quantity flows from matter alone, since it flows from the grade of corporeity, which form provides, and thus according to diverse forms we see quantities varied otherwise, if the same quantity always inhered in matter, accident would be united more strongly and intimately to matter than substantial form, which is varied, although matter essentially regards substantial form prior.

To the second it is said, that another equivalent is not subrogated for accidents, because a diverse subject cannot contain the same accident numerically, which another subject [contained], because one natural cause does not contain the effects of another totally even as to all individuation; only the first cause can contain and supply that totally because of the omnimodus subordination of second cause to first in every notion of being, about which we spoke in Physics q. 12 and we will speak below in q. 12. And for this reason God sustaining accident outside a subject conserves it numerically the same. But truly matter with diverse forms subrogated is conserved numerically the same, because any form is regarded inadequately by matter, and it is capable of all of them, that it may be conserved by any, but accident does not regard multiple subjects, but is sustained and individuated adequately by one.

To the first, from the beginning about dispositions determining matter, and effecting generation in the last instant we will speak in the following article, because about this there is special difficulty.

To the second it is answered, that quantity does not follow matter inherently and emanatively, but only follows matter, as it is under form, and as it receives from it the grade of corporeity, whose proper accident is quantity, as St. Thomas teaches on the first [book of Sentences], q. 76. But quantity is said to follow matter, just as quality [follows] form, both because of similarity, and because of generality; because of similarity indeed, because matter is purely passive, similarly quantity is in no way active;

but because of generality, because quantity is as general to matter, as the grade of corporeity, but no matter is found without corporeity, and none without quantity.

But what is said, that matter is individuated through quantity, and must be supposed individual in the instant of generation, it is answered that matter is not individuated through quantity substantially, but through its own incommunicability, but quantity only concurs not so much to the notion of individuation, as to its multiplication, and division, for this is done through quantity, and it is had as a dividing condition and necessarily required, that its division being posited, not from it but from substance or matter divided under quantity diverse substantial individuality may result, as we will say below in question nine treating of the principle of individuation. Hence however it suffices that matter have the quantity by which it is individuated, and individuates in the instant of generation, by priority of formal cause from form, priority of dispositive cause, and material from matter, but it is not required that it be coeval to matter itself, and perpetually inhere in it, which will be explained more broadly there. Nor does this have special difficulty in man, because although his form is entitatively spiritual, nevertheless informatively and virtually it is corporeal and as quo, insofar as it provides the grade of corporeity, from which quantity follows, just as other corporeal accidents. And thus the whole itself which results, is simply corporeal, namely man and thus capable of quantity as quod, but the principle of receiving quantity as quo is matter itself as it is under form, insofar as it gives the grade of corporeity.

To the second it is answered that those accidents which remain in the generated thing are not numerically the same as were in the corrupted thing, but similar, as St. Thomas expressly teaches in De Generatione I, lect. 10, because some forms have such symbolization and affinity, that they seek similar accidents especially at the beginning of their generation when they have not yet obtained all their perfection, and among these there is easy transmutation, like embryo into animal, animal into corpse, and thus since they are vital forms and tending to a further form they seek similarity in accidents. But sometimes the generator produces an accident similar to what was in the corrupted thing because of the necessity of the matter from which generation is made. For which it should be noted, that forms which are generated, or when augmentation or nutrition is made anew, although they do not have proper accidents or proper passions from matter, nevertheless they obtain many common accidents from the determination of the matter into which form is introduced, because common accidents do not emanate from form, but from the generator providing them according to the occurring matter and circumstances, as it is clear that place and position are provided by the generator, even when something is generated outside its proper place as a common and changeable accident: but since the generator so acts on the patient that it is also reacted upon by it as we will say below in question five, and does not perfectly conquer the patient in all things, it is necessary that in the generated thing itself some accidents are produced by the generator not absolutely as it is in itself, but as modified and tempered through the reaction of the patient, for by that the generator is determined to produce some qualities, which from itself alone it would not produce, hence when water or fire, or iron kills an animal, and the form of a corpse is generated either by them, or by heaven, as by the principal agent, then those common accidents are produced, which according to the resistance or exigency of the patient, the generator can produce, and so sometimes heat is produced in the viscera of the animal, although the form of a corpse is introduced by a cold agent, because that cold agent although per se and directly it only produces cold, nevertheless as it is reacted upon by the hot when it kills the animal, it is imbued with hot qualities, and thus also produces some heat with the form of the corpse: but sometimes such heat is produced through antiperistasis, or circumobsistence of the contrary, and by heaven introducing the form of the corpse, as by a per se cause. What antiperistasis is we will say in question five. And for the same reason we see the nutritive sometimes generate food with alien and harmful qualities, because of reaction from the matter, which imbues nutrition with its qualities, and similarly an animal is generated with other qualities, although the seed is good because of infection of the blood, which is the matter. Thus therefore the agent, or generator is to be considered not only what it can do according to the modification which it has from the resistance of the patient, or reaction, and according to the power, which it participates from there, and similarly according to the power, which it has from heaven, and from other surrounding things by all of which it is determined, or receives power of producing some common accidents, according to the exigency of the matter in which it operates, and thus it can generate similar color, scar, and similarly impulse, and other similar things not by its power impelling anew, but continuing the impulse insofar as from the impelled body a corpse is generated, and so the power impressed by the impeller on the animal itself which is corrupted, when in the corrupter it does not find a contrary disposition by which it is extinguished determines the corrupter itself, and communicates to it the power of continuing a similar impulse in the corpse. Nor does it obstruct, that sense perceives no change in this, for it does not pertain to sense to judge about individual change, which is from the corruption of the subject alone, when an accident of the same species is subrogated to it, but then when accident is altered, and changed without the subrogation of another similar.

But you will still object St. Thomas in Contra Gentiles IV, ch. 81, saying: "That the matter of man after his death which was subject to such a form remains under the same dimensions from which it had, that it would be individual matter," therefore matter is not denuded of every accident at least quantity, by which it is sealed, and determined, that it be this individual matter. And it is confirmed, because antecedent dispositions do not have a contrary by which subsequent ones are corrupted, since they are of the same nature with them, therefore they remain. Nor can it be said that they cease through the definition of the subject; for against this is, because the ultimate disposition since it is annexed to the generated form itself, is not corrupted through its destruction, since rather then it is generated, but disposition below the ultimate is compatible with the subject to be corrupted, therefore it does not cease from the sole cessation of the subject, but from a contrary; but this is not given, because the ultimate disposition is not contrary to that antecedent, which is below the ultimate, but is of the same species, for example, heat as eight with heat as seven.

It is answered that St. Thomas is to be understood, that matter remains with the same dimensions radically, insofar as matter is the root of the same dimensions not formally, because the same quantity does not remain, nor under the same form, nevertheless there remains in matter order to the same form, that is, soul as to be recovered through resurrection divinely, and thus the same dimension remains radically. Which St. Thomas confirms there saying that corporeity is twofold, one substantial, namely the notion of body from the genus of substance, which is nothing other than form itself, the other accidental, which is the species of quantity which is body. And about this St. Thomas adds: "That although it yields into nothing when the human body is corrupted, nevertheless it does not impede, that the same man numerically rises again, because the same corporeity remains, the same form of man remaining." Therefore St. Thomas thinks that the same quantitative dimension does not remain in the matter of man, but the same order to human form, whence it will have the same dimensions, because it will have the same corporeity. We will explain other places of St. Thomas from q. 7 and 9 of the third part in the following article.

To the confirmation it is answered that antecedent dispositions are not corrupted by the ultimate disposition directly as by a contrary, but indirectly, and per accidens, because they introduce a form incompossible with the preceding, and consequently the subject of such antecedent dispositions is destroyed, and so they themselves cease at the cessation of the subject in which they were: but it is not inconvenient that per accidens, and indirectly something be corrupted by its similar, the foundation of it, on which it was based, being destroyed.

ARTICLE VII.

How the ultimate disposition is caused, or causes substantial generation?

Supposing the opinion explained in the previous article, that form is introduced into matter stripped of all form, both substantial and accidental, a twofold difficulty urges to be treated in the present article. First, how the ultimate disposition can be caused in the manner in which the other preceding ones were caused, for others are introduced in the subject itself which is corrupted, but the ultimate disposition if it were caused in the subject itself, would be corrupted with it, and thus would not be joined to the substantial form which is newly generated. But if the ultimate disposition is produced in the subject which is newly generated, then it would not be produced through alteration like the other preceding ones, and thus will not be continuous with them, and consequently will not be the cause of corrupting the form, and ultimately disposing matter for the introduction of form, since it does not exist in the subject before the generation of the substantial form, and consequently does not expel the corrupted form, nor does it dispose matter itself, that it may receive the form anew, since after the form itself such disposition belongs to the subject, but whatever is below such disposition is compatible with the corrupted form, and thus does not expel it.

The second difficulty is, how the ultimate disposition can cause the form which is newly generated, either effectively or materially, since that disposition passes away with the subject which is corrupted, since it does not remain in bare matter alone, supposing the opinion explained in the previous article, and to be explained below in question 9, that accidents are not subjected immediately in prime matter, and thus do not pass from the corrupted to the generated, from which it follows that the ultimate disposition cannot materially determine matter, since it does not inhere in, nor affect it. Similarly also it cannot effectively attain the form itself, because it follows after it in the subject, therefore it cannot effectively generate it, and thus the form will be generated effectively by the remote disposition, which is less than the ultimate itself, which cannot stand, because it is compatible with the corrupted form nor does it have perfect and ultimate power which is ultimately ordered and connected with the generated form, therefore it cannot effectively influence it.

And it is further urged, because if the ultimate disposition is not effected by the generator in the subject to be corrupted, but in the generated thing itself, therefore in the instant of generation the substantial form itself will be effected first, and through it the ultimate disposition will emanate as its accident, therefore it is not the effective power of the generator itself with respect to the substantial form, since rather it emanates from the form itself. Similarly in the instant of generation matter must be presupposed prepared and disposed that form may be introduced, but then matter is denuded of all accident and disposition, therefore of all formal effect of the accident disposing and determining matter, therefore matter does not remain determined and disposed either formally or virtually; not formally, because no disposing form is then; not virtually, because no other form remains, in whose power that disposition is contained, unless only a certain extrinsic connotation that immediately before there was a disposition not ultimate, because the ultimate was not in such a subject; but this does not suffice that matter be said to be intrinsically and really determined and disposed.

Finally, there is a general difficulty, how in that instant dispositions can operate effectively, because the preceding ones then are not, but cease to be, but the subsequent ones are then effected, therefore they do not effect generation itself. And given that they then exist, they cannot act effectively in the subject in which they are, as St. Thomas teaches in Summa Theologiae I-II, q. 85, a. 1, ad 4. Nor does the subject itself act through them, because otherwise the same part would act and be acted upon, would be mover and moved.

These difficulties little urge those who hold that accidents are subjected in matter immediately, and consequently that those which are in the corrupted can remain in the generated, and thus they easily concede that the ultimate disposition is sent by the generator into matter itself, when it is under the corrupted form, and thus prepares matter through the ultimate disposition, which it has before the form, and consequently the ultimate disposition does not emanate from the form itself, for which opinion many are cited by Fr. Suarez in Metaphysics disp. 14, sect. 3. But because many others think that accidents are indeed subjected in matter alone, nevertheless presupposing first union to substantial form, as the Conimbricenses in De Generatione I, ch. 4, q. 4 and Suarez considers probable in the cited place n. 37 and 40 and 60, therefore there is still place in this opinion, that it be said that the ultimate disposition is not given in matter before the substantial form, but emanates from the form itself. Hence Suarez himself in De Gratia, tom. 3, bk. 8, ch. 13, n. 10, although he says it is more probable that the antecedent disposition does not perish in the instant of generation, but remains in the generated thing, and there is consummated in the notion of ultimate disposition, nevertheless admits the opposite as probable, but says that in that opinion it is necessary to respond that either the ultimate disposition does not prepare matter, but form is received in matter immediately, by this very fact that it is denuded of all form, or if it prepares matter, it itself as preparing is not from the form, but from the generator.

Therefore the difficulty is reduced to this, whether the ultimate disposition proceeds from the generated form quasi effectively and emanatively, and yet prepares and disposes matter itself; or indeed, if it prepares matter it does not proceed from the form itself, but from the generator itself; or finally whether the ultimate disposition in no way prepares matter for the form but is introduced into bare matter, but the ultimate disposition follows the form as a disposition adorning not preparing, and determining matter to such a form. But if the ultimate disposition has both, namely to determine matter, and to follow the form, it remains to see how it does this in the instant of generation, and especially, whether the ultimate disposition has to be the effective power of the generator in that instant.

I SAY THEREFORE FIRST: Whether accidents are subjected in matter alone, or in the whole composite, the ultimate disposition is never simultaneously with the form which is corrupted, but with that which is generated. This conclusion is to be established as certain in this difficulty. And it is proved, because the ultimate disposition expels the opposite form from matter, because as St. Thomas says in De Veritate q. 28, a. 8, ad ult., through heat in the highest degree the form of water is expelled, and thus they are not simultaneous. And it is clear, because this expulsion is made through the incompossibility of the ultimate disposition with the corrupted form, for all preceding dispositions tend to the expulsion and corruption of the form, and therefore are opposed, and contrary to it, therefore the ultimate disposition is that which is ultimately opposed, and thus is incompossible with such a form, since no other further remains, which makes for its expulsion, therefore it is not simultaneous with such a form, because it has incompossibility with it. Hence even if accidents are received in matter alone, nevertheless because it cannot have simultaneously opposite and incompossible forms, it cannot simultaneously have the ultimate disposition and the corrupted form.

And just as for the generated form, that it may formally expel the corrupted, it is not required that it be simultaneously with it in matter, otherwise two forms would be in it, but it suffices that it be joined to it through succession and expulsion not through simultaneity, so that the ultimate disposition may dispositively expel the corrupted form, it is not required that it exist simultaneously with it, but that it succeed it by expelling not by existing simultaneously. But that the ultimate disposition is simultaneous with the generated form St. Thomas affirms in the cited question De Veritate a. 7, ad 2, saying: "That consummated heat is introduced simultaneously with the form of fire." And it is taken from what has been said, because that ultimate disposition, just as it is incompossible with the corrupted form, so it is compossible and connected with the generated form, therefore it is simultaneous with it, for matter is never given without some substantial form, with which that accidental [form] is.

I SAY SECONDLY: The ultimate disposition is well compatible with these two, namely that it prepare matter for the form terminatively, which is not only to be given for adornment, but for the preparation of matter towards the form, and similarly that such disposition be caused by the form in the order of formal cause, and according to dependence in being. St. Thomas affirms both in De Veritate q. 28, a. 8, at the end of the body, and in IV Sentences, dist. 17, q. 1, a. 4, q. 1 and 2 and a. 5, q. 3, where he affirms: "The ultimate disposition is an effect of the form in the genus of formal cause, and yet precedes it in the genus of material cause." But especially St. Thomas can be seen in III Sentences, d. 13, q. 3, a. 1, where he distinguishes three genera of disposition: "In one way so that it falls as a medium between the subject, and that perfection, as an instrument of that perfection, as transparency disposes to light. In another way something disposes to form as preparing matter for the reception of form, so that it pre-exists in matter before the form in the order of becoming not in the order of being, as heat disposes to the form of fire, not because it falls as a medium between form and matter, but matter is appropriated to the form of fire through the advent of heat. In a third way something disposes to some perfection, as what makes for the goodness, and decency of perfection, as the beauty of a person makes for royal dignity." Behold St. Thomas distinguishes disposition preparing matter for form from disposition adorning, and conducing to decency, and in the first order he places ultimate disposition, as heat to the form of fire, which precedes only in the order of becoming, not in the order of existing or as a medium existing between matter and form, and consequently not existing in matter prior to form.

But the conclusion is explained, by showing those two are not incompossible, namely to depend, or be caused by the form, and to prepare, or determine matter to such a form consummatively, and terminatively, just as antecedent disposition and alteration to it prepares, and disposes matter inceptively. Which is clear, because ultimate disposition, e.g. heat as eight, is an accident connected with the form of fire and depending on it in being as a proper passion contained in its root, as we clearly see that generated fire has heat as eight as a property and secondly heat as eight has to be of the same nature, and species with heat as six, or seven which before the instant of generation disposed wood to the form of fire, and thus ultimate disposition has to be the terminus and consummation of heat antecedently disposing. Which St. Thomas openly acknowledges in De Veritate q. 28, a. 9, ad 10, where he says: "That those things, which are made in an instant are said to be made, and to have been made, because insofar as that instant is the terminus of prior time in which it was becoming, it usurps for itself what is owed to prior time." Therefore St. Thomas thinks that to ultimate disposition in fact of being it also belongs to be the terminus of antecedent disposition, and of prior time, and thus it usurps its denomination for itself. Therefore ultimate disposition according to these two respects, or formalities can follow the form, and dispose matter in a diverse genus of cause, because since it is an accident incompossible with the preceding form, but connected, and subordinated to the generated form as its proper accident, it is necessary that it depend on it, and follow it. But because it is the terminus, and consummation of preceding alteration, through which matter was disposed to the form to be generated, therefore through that ultimate disposition terminatively, and consummatively matter is disposed, and prepared. And thus that ultimate disposition terminates a twofold action of the generator according to diverse formality, namely alteration and generation; alteration indeed, insofar as it is the consummation, and terminus of preceding alteration; but generation insofar as it is a proper passion connected to substantial form, and thus follows substantial form. Nor is it new, that two actions concur to one effect according to diverse formalities, as the sun and man to generating man, or if there is given only one action, namely generation, it will virtually contain the power of preceding alteration in whose place it is subrogated by completing it.

I SAY THIRDLY: The ultimate disposition is not a power efficiently influencing substantial generation nor the corruption of the opposite form. This is from St. Thomas in De Veritate q. 28, a. 8, ad 5, from those which are placed in the second place, where he says: "That disposition does not do anything to form effectively, but only materially insofar as matter through disposition is made congruous for the reception of form." And he speaks of the ultimate disposition. But the reason of the conclusion is manifest from what has been said, because the ultimate disposition since it is an accident cannot operate effectively, except as a power received in some subject, and as inhering in it, for heat is not said to heat, but the hot thing, because form, or principle quo such as heat, or ultimate disposition cannot operate except by some principle quod operating, since principle quo is essentially of something operating through it, for it is that by which something operates, therefore it essentially supposes principle quod. If therefore the ultimate disposition operates generation efficiently, necessarily it does this as received in some subject, but it is not received in the corrupted thing, because it ceases to be nor in any surrounding body, because that is not disposed, nor from it is the thing generated, therefore in the generated thing itself, as has been shown, because it follows its form, therefore it cannot effectively attain generation itself, because it cannot effectively act in the subject in which it is received, as St. Thomas says, in Summa

Theologiae I-II, q. 85, a. 1, ad 4, and if it could effect, nevertheless not generate, because if it is received in it, that it may effect, it already supposes it to be generated, and existing. If it is said to influence at least effectively in the corruption of the opposite form, against this St. Thomas objects in De Veritate q. 28, a. 8, in the body, where he shows that grace cannot through acts elicited by itself effectively operate for the remission of fault which is corruption of the opposite form, but through information of the subject, for by informing it expels the opposite form not by effecting, and the reason is, because efficiency is not directly to corruption, otherwise it would be terminated per se first to non-being, which is to effect nothing, but first and per se it is terminated to generation itself, or to form, secondarily to the corruption of another, therefore if the ultimate disposition cannot effectively concur to generation, neither will it effectively influence corruption.

But from this conclusion a great difficulty arises, by what power the generator, when it is absent effectively attains the generated thing itself, for the ultimate disposition as we have said, does not concur effectively to generation, but disposition below the ultimate is not sufficient to produce the generated form, e.g. heat as seven to produce the form of fire; both because it cannot produce heat as eight since it is inferior to it, therefore neither the form of fire; and because that antecedent disposition is subjected in the corrupted thing itself, because it is compatible with its form, therefore in the instant of generation itself it does not exist, therefore neither does it operate effectively. Nor can it be said that it remains virtually, or that that antecedent disposition is continued with the generated form, as St. Thomas signifies in Summa Theologiae III, q. 8, a. 13, ad 2, saying: "That disposition which by the power of generation precedes, naturally follows the perfection; which someone has already attained, as heat which was disposition to the form of fire, is an effect flowing from the form of fire," and q. 9, a. 3, ad 1 he says: "That through heat matter is disposed to receiving the form of fire, which however when it arrives heat does not cease, but remains as a certain effect of such form." Against this it is objected, because if it is so, resolution will not be made in substantial generation down to matter, because that preceding disposition is continued with the generated form, and thus remains in matter, or at least some power remains, in which that disposition is virtually contained, and this power is some accident. To this therefore.

I SAY FOURTHLY: The power of the generator, which operates effectively as decided, and diffused from the generator itself as its instrument, is not the ultimate disposition, but is found with antecedent dispositions, and in the instant of generation does not operate effectively, as existing in the corrupted subject, nor in the generated subject, but in the part nearer to the generated thing itself. This conclusion supposes, that the generator can be related in two ways to the matter from which it generates, for either it is indistant and immediate to it by immediacy of supposit, power, as fire is near to the wood which it burns, and then the effective power of the generator is nothing but in the generating supposit itself, namely heat which is in fire, But sometimes the generator is distant from the matter from which it generates, and is only immediate to it through its power, as the sun when it generates a plant, and an animal which through seed generates another, and then also effective power diffused, and decided from the agent itself is given, as instrument of it, as St. Thomas says in De Potentia q. 3, a. 11, ad 9 and many other places, and we proved in Physics q. 12. Therefore concerning this power diffused in the absence, or distance of the generator the conclusion proceeds. And the first part says, that it is not the ultimate disposition, but is placed with the antecedents. And this is manifest, because the ultimate disposition is an effect conjoined, and annexed to the generated form itself, so that it does not exist except where the generated form exists, as heat as eight does not exist except where the form of fire is, therefore it does not operate except when the form of fire exists, therefore it does not effectively attain form itself, or its generation. But the second part, that that effective power is not in the corrupted subject, when it operates in the instant of generation, is clear, because in that instant that subject is not, since it is corrupted, therefore neither is that power, which inhered in it, but what is not, does not operate effectively through itself, but through some power it does not operate, because concerning this there will be the same difficulty in what subject it is. The third part, that it does not exist in the generated thing as in a subject, nor in its matter, is clear from the doctrine of St. Thomas in Summa Theologiae I-II, q. 85, a. 1, ad 4, and q. 110, a. 2, ad 1, and Quodlibet 10, a. 3, ad 2, where he establishes that disposition, or accident does not act effectively in its subject, but formally by actuating it, therefore disposition existing in the generated thing, cannot generate it as is clear of itself, because thus it will suppose existing before the subject, and consequently ought to be in another subject: nor can it be supposed as existing in matter, and act effectively in it and from it, because since accident cannot operate except as quo, and consequently the subject itself, to which it inheres ought to operate as quod, it would be the same to say that accident operates effectively in the subject, and to say that the subject operates effectively in itself. But nothing moves itself effectively, and much less prime matter, which in no way is active, but passive, therefore accident existing in prime matter cannot operate in it, effectively. The fourth part of the conclusion, namely that in the case where the generator is distant from the matter which it disposes, and from which it generates, some near part ought to be assigned which through power decided from the generator with antecedent dispositions effectively acts in the nearer part and thus generation is made, is clear from there, because nothing effectively acts in itself, but it is necessary to distinguish agent and patient, moving part and moved part, therefore it is necessary that generation be made by one part acting in another, when the generator itself is not present there, that through itself it may act. And this also the Conimbricenses well noted in ch. 5, q. 9, a. 2, §. Wherefore our.

And if you object: Because the nearer part does not have in itself the ultimate disposition, e.g. heat as eight, but something below it, otherwise fire would be generated in it, and not only power for generating fire, therefore such inferior power cannot effectively produce the ultimate disposition, it is answered that that power although entitatively, and formally it is below heat as eight, and below the ultimate disposition, nevertheless virtually insofar as it is an instrument of the generator from which such power is decided, it has power for effectively attaining the substantial form of the generated thing, and its ultimate disposition itself. And this is taken from St. Thomas in Summa Theologiae I, q. 79, a. 4, ad 4, saying: "That in the mixed thing the proper qualities of the elements remain although remiss, in which is the power of elemental forms;" therefore he thinks, that even below heat as eight the power of the generating form can virtually remain. And so heat which is below the grade of heat as eight, cannot through the mode of principal cause produce except heat similar to itself; and not heat as eight, if nevertheless it is considered not only as heat, but as virtuous heat, that is, as derived from fire as its instrument for producing substance similar to itself, and consequently heat as eight, thus it operates it instrumentally not principally. But if the generator being absent, or destroyed that power has become weaker and more imperfect, or has gone out, than that it can produce substance, if it produces it, that will be done by the power of a superior cause, namely of heaven, or of the first cause supplying, what is lacking of the power of the generator, and thus several inanimate forms are sometimes produced by heaven, as when a corpse is generated from slaughter, or from suffocation, for iron is not directly productive of the form of a corpse, but of iron; nevertheless by taking away vital dispositions, e.g. heat, which is in blood it leaves place for heaven, that it may introduce the form of a corpse. But what it is in that power, which is a certain quality, to be the power of substance we explained in Physics q. 12, that it is not something superadded to quality, but only derived from substance itself, and something of it in order to producing similar substance.

But in the generation of living things there is special difficulty, how the effecting part, and the effected part are distinguished, because a living thing is not generated successively from part to part like inanimate things, but the body being organized and integrally disposed the whole generation is perfected in an instant, and therefore it does not appear how from the neighboring part the form of the living thing itself and its ultimate disposition proceeds.

But it is answered from the doctrine of St. Thomas in Summa Theologiae I, q. 118, a. 1, ad 3 and De Potentia 4, a. 11, especially ad 8, where he teaches, that the active power of semen is not in the whole semen, but in the spirits which are included in the semen itself, in which spirit also there is some heat from the power of celestial bodies, by whose power these inferior things act, and those spiritual parts of semen act in others, which are had as matter, and form them, and although that corpulent matter, from which the generation of animals is made, is varied through diverse forms which we call forms of the embryo up to the introduction of the perfect form, nevertheless that spiritual part in which is the active seminal power is not destroyed, nor changed, as St. Thomas says in that solution ad 8, and thus distinction always remains between parts, which effectively act, and parts in which the form of the animal is introduced; for in those spiritual parts, which are more foamy the generated form is not introduced, because from them the fetus is not formed, but from the more corpulent and thicker matter of semen, and blood; otherwise, as St. Thomas argues there, if those spiritual parts were changed, and the fetus were formed from them, as from matter, that seminal power would be destroyed, and thus generation could not be perfected up to completion by the power of semen. But what becomes of those parts having the power of semen after the form of the animal has already been introduced, St. Thomas responds in that cited q. 118 ad 4, that the spirit vanishing, and the semen being dissolved, that active power which was in the semen ceases to be, because it was an instrumental power which ceases when the effect has already been produced. And so that spiritual part is resolved; and evaporates into some body; and thus form is always distinguished. And that active quality of semen although formally it is inferior to the ultimate disposition, nevertheless not virtually, insofar as it is the power of substance derived from it for acting.

From which it is manifest how disposition influences effectively for the introduction of form, or corruption; for it is clear from what has been said, that effective power influencing ought to be in another part, or subject from that which is disposed, and thus the moving part and the moved part are always distinguished, and that inconvenience is avoided, that disposition not existing in the last instant can operate, for then the operating power exists in the nearer part. Similarly also it is clear how matter is said to be disposed either by the ultimate disposition, or by the antecedent; not through extrinsic denomination, but through real information, because before the instant of generation matter is disposed as it were in becoming, and tendency to form through antecedent dispositions, which are subjected in the whole itself, which is to be corrupted, and determine matter itself to the form to be introduced. But in the instant of generation matter is determined in fact of being, and consummatively through the ultimate disposition itself, which is not received in matter alone, but in the whole itself, because it is always connected with form itself, but nevertheless that disposition has a twofold respect, or office according as it corresponds to a twofold principle, namely to the generated form which it follows, as proper passion, and to alteration which it terminates and consummates; and it is not necessary, that according to both respects it prepare, and dispose matter, but it suffices that as it is the terminus of alteration, it dispose it, not as property of form, but because in fact it inheres, and exists in the whole itself, and in its matter, as in the principle quo of receiving, this suffices that through real, and intrinsic denomination it be said to dispose it.

To those places of St. Thomas in which he seems to say, that heat which was in the corrupted thing, remains in the generated thing, it is answered, he does not speak of the same heat in number, but of similar, which therefore is said not to cease, because through similar heat it is continued, yet the same in number does not remain, as St. Thomas expressly says in De Generatione I, lect. 10, and other places cited in the preceding article, and when heat arriving through the introduction of form flows from form itself as in the same places, which are cited to the contrary the holy doctor affirms he cannot speak of the same heat in number, because this cannot flow from the introduced form, which had preceded in the subject.

To the difficulties posed at the beginning, it is answered from what has been said. To the first we say that alteration alone, which preceded in the corrupted subject, does not produce the ultimate disposition, except with the intervention and help of generation, which produces the substantial form, and the ultimate disposition as annexed to it, and as the terminus of the preceding alteration; and according to its respect to the form which it follows, it is posterior to it; but according as it terminates the preceding alteration, and consummates it in the same order of accident, thus it fulfills the office of disposition as terminus, and consummation of that which preceded, and insofar as it consummates and virtually contains the preceding disposition, it is said to precede virtually.

To the second difficulty it is answered, that the ultimate disposition does not effectively cause the form for which it disposes, nor is it had as the power of the generator, but only as a disposition with a twofold respect, first to the generated form, as annexed to it by way of proper passion, second to the antecedent dispositions, of which it is the consummation and terminus, and according to the first respect it follows the form, according to the latter it precedes not in duration, but in nature, and causality, as has been said.

To the proofs against this. To the first concerning efficiency it is answered, that the effective power of the generator does not belong to the ultimate disposition formally, but to the antecedent disposition, as it is the power of the generating substance regarding the substantial form to be produced, and ordered to it, and consequently to the ultimate disposition, which accompanies it, and so the formal ultimate disposition is the terminus or effect of the power of the generator, not the efficient power of the generated thing. Unless we say that the antecedent disposition, and below the ultimate, insofar as it is the power of the generating substance, is also the ultimate disposition not formally, but virtually, insofar as it virtually contains it, just as also the substantial form.

To the other proof on the part of the preparation of matter it is answered, that the ultimate disposition prepares matter consummatively, and terminatively, or in fact of being, so that up to the instant of generation exclusively it supposes matter prepared in becoming, and tendency through antecedent dispositions, but in that instant form is introduced into matter concomitantly prepared through that ultimate disposition, insofar as it is the terminus, and consummation of antecedent dispositions, and is coordinated with them, and thus it has their power as the terminus in which they are consummated, and under this notion it also has the power of material causality, and precedence to form just as the antecedent dispositions had. But form itself according to respect, and formal causality, because it informs matter, is understood to regard matter according to the bare entity of matter, that is, as substantially informable, for thus matter is not informable by substantial form through the mediation of accident, but through itself immediately, and so under this respect of informing form regards only the entity of matter, not accidental dispositions, for it regards those only as determining the indifference of matter to such form, and for this it suffices, that concomitantly disposition be there in the same instant, but it is said to precede under the respect, and order of material causality, insofar as it is the terminus, and consummation of preceding dispositions, which it virtually contains. And so when it is objected, how matter remains prepared virtually or formally, and in what form that preparation is said to virtually remain, it is answered that in reality, and in the instant of generation itself the ultimate disposition annexed to form is given, which as terminus and consummation of preceding dispositions virtually contains them, and continues the preparation, and determination which they made in matter up to that instant exclusively.

To the last difficulty it is answered, that the disposition which is the effective power of the generator is not in the subject which is corrupted, nor in the subject which is generated, because it does not act effectively in the subject in which it is inherently, as is said from St. Thomas in the argument, but it is in the nearer part, in which also the power of the generator is found in its absence, as has been sufficiently shown above.

However, Fr. Suarez in that Metaphysics disp. sect. 3, n. 28, is not satisfied with the doctrine handed down and thinks that distinction about mutual priority between disposition and form does not satisfy; and he objects against it, because if disposition is truly preparing, and not only adorning and perfecting the subject, it is necessary that it determine, and as it were limit its capacity to such form, therefore it also determines the agent itself to introducing such form; therefore it will not be possible, that such form effectively follow from the introduced form. The consequence is clear, because if disposition was from form, and form is effected by the agent, therefore the agent cannot be determined by such disposition which produces form, but rather through form the agent is determined to such disposition.

It is confirmed, because that disposition cannot exercise material causality, and have priority of nature, either with respect to the action by which form is made, or with respect to matter, which it disposes. Not with respect to action, because that disposition follows through the mediation of form, therefore it cannot have causality, and priority with respect to that action, by which form itself is made, since when form is made that disposition is not yet, nor has been made so that it can then cause. But with respect to matter it cannot have this priority, because it cannot dispose matter except by informing it, but that disposition cannot inform matter in that prior, since matter before form is informed by accidents, but that accident cannot dispose except by informing, and inhering, because without inherence it is not and thus neither does it dispose; but if in that prior it does not dispose, to what does that disposition inhere? Not to form, because it follows it, and thus for that prior it does not yet inhere in form. Not to the composite because it prepares for it, but does not dispose it, but matter for it, but it inheres in what it disposes, therefore it will inhere in matter alone, and thus it is not necessary that it follow form, but it is in matter from the agent.

It is answered that the ultimate disposition does not determine the agent itself that it may effect, but determines as its effect; but the ultimate disposition is said to determine the agent not as its power for effecting, but as the terminus of the antecedent disposition, which was the determined power of the agent itself, and decided from it. Then I add that the agent, neither through the antecedent dispositions themselves which it sends into matter, is determined to generating, but before it sends them, it is determined to generating and as a necessary medium, and power of acting it sends those dispositions which are had as its effect, and determined power for generating form, and thus these dispositions proceed from the determined agent, since they operate determinately in its power. Nor does it obstruct that antecedent dispositions do not suffice to determine matter or agent; for they are not sufficient to determine in fact of being, and consummatively, but well in tendency, and inceptively; and insofar as they are the power of the generating substance, also effectively.

To the confirmation the antecedent is denied. To the proof on the part of action it is answered, that disposition does not receive in itself the action by which form is made, but prepares matter in fact of being, that form may be received in it, which is the terminus of action, and for this reason it is said to dispose for action in its terminus. Nor is it required for the office of material cause, that existence precede, as in efficient cause, but it suffices that in reality it accompany, and so in no duration is material cause given without existence, as we proved in Physics q. 11. To the proof on the part of matter, it is answered that that disposition cannot dispose except by inhering and informing by concomitant inherence and existence, and found in reality, but not by formalizing inherence, or formally constituting all priority, and causality of matter towards form, or of form towards matter: and so for that priority of nature, or formality and concept, by which matter is understood to substantially receive form, dispositions are not understood to inform matter (although in fact they are there), but only matter to constitute substantial composite with form, but the preparation itself and determination of matter towards such form is only presupposed there concomitantly, or antecedently, but is not formally understood, but that pertains to another priority, or posteriority of nature, for it is there antecedently by reason of antecedent dispositions, but concomitantly by reason of ultimate disposition, which in fact of being terminates them. And thus it is clear to that interrogation where for that prior does disposition inhere? For we will say, that for that formal prior it does not inhere, because that priority is not the formality of inhering, but of substantially composing, but concomitantly, and in reality then it inheres in the composite as in the subject quod, and sustaining it, but in matter as subject quo of receiving, and determinable through those dispositions, nor is it necessary for this that it inhere in the composite that it be partly in form, partly in matter, but it suffices that it be in matter as in subject quo, and in the whole composite as in subject quod, as we will say more broadly below in q. 9.

QUESTION II.
ON CORRUPTION.

ARTICLE I.
How corruption differs as a type of change from generation and from annihilation?

As we resolved in Physics III, q. XIV, and Physics V, q. XIX, art. I from Aristotle, motion as distinguished from change commonly so called requires two conditions. The first on the part of the subject, that its subject be a being in act, that is, informed by a substantial form, not a being in potency, which is prime matter, which nevertheless suffices for change. The second on the part of the terms, namely that motion properly so called be between positive terms and consequently properly or positively contrary, while for change a privative opposition from non-being to being, or vice versa in a subject capable of both, suffices. From this it appears that corruption is not motion strictly so called as opposed to change, because it is not between positive terms but goes from being to non-being. But there is doubt about two things. First, whether from the fact that the terminus ad quem of corruption is the cessation of form, it loses the character of substantial change and is only a privation of generation. Second, whether from the fact that it is only in a capable subject it differs from annihilation, by which a thing totally ceases into nothing. And so the doubt will remain whether both annihilation and corruption are changes. And we are speaking here of corruption in the sense of change, for in the sense of action we will treat in the following article whether generation and corruption are the same action, or how they are connected to each other.

And so it is the opinion of some that corruption is not a real change, but only a privation of action and the concurrence by which the preceding form was conserved, for corruption is opposed to generation, and not because it produces something, but because it destroys, therefore it is privative, and thus does not imply real change, indeed not even identity in action with generation, but connection and nexus, because just as when one form is introduced another is uprooted, so when generation is posited corruption follows, consequently, therefore they are related not identically. And this not always, for sometimes generation can be given without corruption, as if no positive form is presupposed in matter which is corrupted. The reason for this is that corruption tends to negation, that is, to non-being: therefore it is not a positive change, but negative; for change is denominated from its terminus ad quem.

Another opinion is at the other extreme which holds that corruption is so much a positive change that even annihilation is a positive change, because for annihilation infinite power is required, just as for creating, therefore annihilation itself is some positive change or operation, since it is founded on positive power.

NEVERTHELESS I SAY FIRST: Corruption is essentially and formally a change distinct from generation. I say essentially and formally, because I suppose that generation itself, to which corruption is opposed not only radically but also formally, is a change as was proved in the preceding question, article one. But corruption, if it is a change, since it is formally opposed to generation, will also formally be a change just like it, which is more verified in corruption than in generation, because for corruption it is necessarily required that the form itself which is to be corrupted precede as the terminus a quo, and it cannot precede only by priority of nature because through corruption the form ceases to be, but nothing ceases unless it first exists since it is a transition from being to non-being; but nothing exists except in some duration, not however in mere priority of nature, which is not a priority of existence, but of signification, and formality, and causality, insofar as by it is signified that this depends on that, and according to this formality and not according to another is coordinated with it. But in generation, since it proceeds from non-being to being, it does not suppose any duration of its terminus a quo, and so it suffices for the change of generation that privation precede by priority of nature, for it suffices that some subject, as far as is from its nature, lack some form with capacity for it so that it needs an action acquiring such form, and consequently which regards it as the terminus ad quem of such acquisition, and consequently regards some terminus a quo, which indeed is privation, not which exists in that instant or affects the subject, but which in that instant is expelled, and is not permitted to follow upon nature. But it suffices for the notion of terminus a quo that in the instant itself it be in being expelled from the subject, not as existing, and consequently change is verified, that it be otherwise at this moment of time than before in priority of nature.

That corruption is a distinct change from generation is manifestly asserted by St. Thomas in De Veritate q. XXVIII, art. I and VI and is taken from the Philosopher in Physics V, ch. II, lect. II in St. Thomas, where he distinguishes as two changes that which is from subject to non-subject - this is corruption, and that which is from non-subject to subject - this is generation, while that which is from subject to subject is motion, because it is between contraries, and not between contradictories. But change is said to be from subject to subject, or from non-subject to subject, understanding by the name of subject not the suppositum or substance itself, but being or non-being itself, or affirmed and not affirmed, as St. Thomas explains in the cited q. XXVIII, art. 1. But the reason for this is that not only is something changed when it acquires form, but also when it loses it, indeed then change appears most, when some form is lost, as when air loses light, or a body whiteness, because then it is verified that it is otherwise now than before. But that it is a distinct change from generation is clear, because they regard distinct terms both ad quem and a quo, but since change consists in transition from one to another, where there is a distinct terminus a quo and ad quem, there is a distinct transition, and consequently a distinct change, but it is clear that corruption passes from the being of form to its non-being, while generation conversely, from the non-being of some form to its being, therefore they imply a distinct transition, according to distinct termini a quo and ad quem.

But that corruption is a real change is shown by distinguishing what is real as something positive, or what is real, that is, found on the part of the thing, although on the part of the thing it does not posit but removes, just as we say darkness and blindness are given on the part of the thing, because not fictitiously but truly they are found. In this second way St. Thomas distinguishes corruption really from generation in the cited q. XXVIII, art. VI. And the reason is that in this way on the part of the thing is found and verified the formal terminus itself, or the having-been-changed of corruption, namely the cessation of form, because in fact the form is corrupted, therefore the change itself or becoming is really found. However it is not called a positive change, because its terminus is not positive, therefore neither can the change itself be positive, for that which in itself is not positive is not positively made or passes.

You will say: Through corruption not only does something negative result as terminus, namely privation of form, but also something positive, namely that that form remains in the potency of matter in order to supernatural agency, which before was in act, therefore some positive change is found in matter, namely a new mode of potentiality, and order to a different agent. It is responded that matter itself receives nothing positive through the removal of form, which it did not have before, because even before it said order to form, as educible once by a natural agent, and many times by a supernatural agent. Wherefore when form is educed, and matter is changed through it, the respect to the natural agent ceases, lest it be able to educe it further, not from change of potency in matter, but from defect of the extrinsic natural agent; but when form is corrupted, no further change is made in the potency itself of matter as to this respect of containing form.

From the posited conclusion it is gathered that if in the generation of some thing no positive form to be corrupted is given, but only privation to be removed, as when light destroys darkness, then corruption and generation are not two changes, because corruption does not find a form which it destroys, and makes pass from being to non-being, but only finds privation on the part of the terminus a quo, which is not changed from privation to another privation, for transition from non-being to non-being is not change, therefore there will only be change from privation to being, therefore corruption of privation is not another change than transition to being, which indeed is generation. And so it is customarily taught in the matter of justification, that if the fault which is destroyed is only privation in the soul, justification is a single change insofar as it posits grace and remits fault, but if the fault which is destroyed leaves something habitual by way of something positive, and conversion to the creature, then there is a double change, that removal of fault, and introduction of grace.

I SAY SECONDLY: Corruption and annihilation differ on the part of the terminus ad quem, because through annihilation a thing totally ceases to be both on the part of the subject and so annihilation is not change properly so called just as neither is creation, although it is signified through the medium of change. This conclusion is manifest, because annihilation is opposed to creation, and so just as creation has no concurrence on the part of the material cause, but only on the part of the efficient cause which gives the whole being, both on the part of form and on the part of matter, so annihilation is not cessation through concurrence of some material cause, but through mere removal and suspension of the Divine concurrence perfecting and giving the whole being, whence since it does not happen in any subject it is not change. From which it follows that the terminus of annihilation is said to be totally nothing itself, not only because the thing itself which is corrupted totally ceases, but also because no positive terminus is adjoined to it, which is newly made, into which the destruction of the thing itself ceases, but purely on the part of the terminus ad quem nothing is found, and this is especially in annihilation, namely that it ceases into nothing, whence however much something is destroyed, whether totally or partially if nevertheless it does not cease into nothing, but some positive terminus is adjoined to it, into which it ceases it is not annihilation. And for this reason in the Eucharist bread is not annihilated although it is totally destroyed and ceases to be, yet it does not cease into nothing, but into the body of Christ, and so it is destruction of bread through conversion, not through annihilation. The reason for this is that annihilation as we said happens through suspension of concurrence totally conserving in being, therefore it pertains not only to totally destroy some thing, but also to adjoin no positive terminus to it, and substitute, into which the destruction of the thing is terminated, since for positing that positive terminus action is required, and positing of some influx producing or attaining that terminus, therefore if annihilation is suspension of all concurrence, it excludes every positive terminus adjoined to itself, otherwise something will not cease by way of annihilation, but by force of production of another terminus incompossible with the thing which is destroyed. And so for annihilation both are required, both destruction of the whole being, and cessation into nothing, without positing of any adjoined positive terminus from the very fact that it happens through suspension of Divine concurrence.

But you will say: God can well annihilate form without annihilating matter, and accident without annihilating subject, therefore destruction of the whole being is not of the nature of annihilation, for then although the being of form in act is destroyed, but it remains in the potency of matter, as when it ceases to be through corruption. It is responded that this annihilation is not simply and in all ways annihilation, just as conversely production of form alone or accident by God is not simply creation, but concreation, when it happens together with matter, so suspension of concurrence toward form alone is not annihilation simply, but is reduced to annihilation, as a certain aspect of it, and because it has the mode of annihilation, insofar as it happens through suspension of concurrence without another form succeeding it, but it ceases into nothing, for that concurrence conserves that thing with total dependence and subordination to God, and therefore its suspension is called annihilation, although it only removes part of the entity. But that it remains in the potency of the subject, not indeed in order to natural agency, but in order to Divine power does not argue that this happens through positive action, because this which is to remain in the potency of matter is not a terminus or effect of such suspension of concurrence, but was afforded in matter itself from the proper nature of matter, and because this is not destroyed through suspension of concurrence, therefore it is not annihilation in all ways, both as it is in act, and as in the potency of the subject.

From which you may gather that some badly affirm that through Divine power some creature can attain annihilation, because not as much power is required for destroying as for producing, for it is easier to destroy than to build, and so since through destruction no entity is posited, but removed it does not involve repugnance that it be done by some creature. However, St. Thomas thinks the opposite in III p. q. XIII, a. 1, speaking even of instrumental cause, which he denies can be given for annihilation. And the reason is manifest, because although to destroy something by positing a form or disposition incompossible with it is easier than to build, because such a form or disposition destroying is more easily posited and produced, nevertheless to destroy something through suspension of concurrence of some cause pertains only to that cause which exhibits such concurrence, whence since the concurrence which is suspended through annihilation is concurrence exiting from God Himself, its suspension can pertain to no created cause, but to God alone. But when secondary causes corrupt something, the concurrence of God toward the corrupted form is also removed, not because such suspension happens through the creatures themselves, but because through them production of an incompossible form happens, to which God also concurs, and by concurring to it He ceases to concur to the opposite, about which we will speak in the following article.

To the reason for doubting posited for the contrary opinion it is responded from what has been said that corruption is not mere privation, but change consequent upon generation, and terminated to privation of form, for it is transition from being to non-being, and thus the argument proves that it is not real positive change, that is, positing something on the part of the terminus, but real corruptive or privative change, which is called real because it is found in reality, not because it posits something positive in reality.

ARTICLE II.

Whether corruption and generation are the same action, by reason of which the generation of one thing is the corruption of another?

These two difficulties are connected, and the resolution of one depends on the resolution of the other. Concerning the first, therefore, there is doubt whether corruption is in some way an action, at least secondarily, or whether it in no way pertains to the nature of action, and how it is distinguished from the action of generation. On this authors have various opinions. Some deny that the generative action in the nature of action is in any way terminated at the corruption of form, for the touch of action wherever it touches, whether primarily or secondarily, is an act of efficiency, but everything that efficiency touches it touches by giving being, but where it does not give being but takes away, there it ceases to touch. Therefore corruption will happen by the very suspension of concurrence, or omission, but not by secondary attainment of action. Others think that efficiency or action secondarily, and by at least a distinct formality, attains corruption, about which can be seen Master Bannez on chapter IV, book I of On Generation, explaining this axiom: that the generation of one thing is the corruption of another, and there he cites Cajetan. And the reason is, both because generation and corruption are one motion, although it includes two changes, as is clear from the places cited in the preceding article, therefore it is one action, and because suspension of concurrence if it is alone does not corrupt but annihilates, but adjoined or consequent upon action, it pertains at least secondarily to that action, for it pertains no less to action to produce a terminus than to remove the opposite, and so as to be corrupted is truly to undergo and truly to be changed, so to corrupt and destroy is truly to act, at least secondarily.

However, both seem to be composed by saying that corruption is not formally action even mediately, but virtually. For in two ways it can be understood that some action mediately attains some terminus. In one way because it principally attains one terminus, and by continuing the same influence or reason of acting it touches another, as less principal and contained under the prior, as principally and immediately some nature is produced, and mediately its proper passion, by mediation however of influence and causality upon it. In another way because when the principal terminus is produced the active influence ceases, or by means of formal causality or information of the produced form expulsion happens, or privation of another incompatible with such produced form, and so he who makes a thing incompatible with another is said to effectively corrupt it by virtual not actual efficiency, namely by means of the terminus, whose information expels and corrupts the other form by way of secondary formal effect. We say therefore that corruption is not action in the prior way, but in the second, for when form is produced action does not further influence to corrupt, nor indeed can influx be understood, because with respect to the form to be corrupted it influences nothing but removes, therefore positive influx is not continued, because there is no further positive terminus, but for negation influx is not necessary. But when form is posited, which is the terminus of action, it is said to virtually contain action, namely terminatively: but this imports with itself incompossibility of the opposite form, because it has adjoined privation of it, and so it touches it and expels not by efficiency, but by incompossibility arising from efficiency of form, that is, from effected form, and terminating efficiency. Which resolution is deduced from St. Thomas in II, distinction XXXIV, question 1, article 11 ad 5, where he says: "That which corrupts and generates does not have from the same that it generates and corrupts, but from that it induces its form, it generates; and so insofar as it is a being it generates, but from that its form is necessarily conjoined to privation of another form it corrupts." Where St. Thomas does not place corruption in influence of action, but in the very apposition of form having adjoined privation. Whence it is not necessary to reduce this to mere suspension of concurrence conserving the opposite form, but to action producing form incompossible with it, which incompossibility being posited, and by force of it concurrence ceases. And so also unity of action or motion is saved on account of unity of positive terminus, but double change by force of that efficiency, because a double terminus is touched, one by acting, the other by destroying, as has been explained.

Concerning the second difficulty, namely how these two changes of generation and corruption are ordered, so that the generation of one is said to be the corruption of another, some think these changes are ordered only consecutively and successively, not identically in the same action or motion. However, St. Thomas in question twenty-eight On Truth, article six, to the last clearly says: "That the generation of one is called by the Philosopher the corruption of another by concomitance, because of necessity they are simultaneously, or on account of unity of motion, which is terminated at these two changes." Where by the name of motion is understood action having that double change. And in I-II, question CXIII, article vi ad 2, he says: "That infusion of grace and remission of fault according to substance of act are the same." And in the same way he compares generation and corruption. Therefore he thinks that they are identified in the nature of action.

Therefore the generation of one, when it has adjoined corruption of another, is said to be corruption for two reasons. First, on account of succession and order of forms succeeding each other because forms are incompatible, and so when one enters, another recedes; and then the sense is that the generation of one is the corruption of another causally, because corruption is connected to and succeeds generation. Second, more strictly the generation of one is said to be the corruption of another, not only on account of succession of forms and changes, but on account of unity of action or motion, because corruption is not an action distinct from generation, but the same action formally generative is virtually corruptive by reason of the generated terminus, as incompossible with the opposite form in which compossibility positive influence virtually remains, as terminated at the generated form, as has been said.

We said in the conclusion, when generation has annexed corruption to denote that, which we signified in the preceding article that corruption which is true and real change is not given, unless when positive form to be corrupted is given, for if only privation to be removed by generated form precedes, as when dark air is illuminated, then removal of that privation does not happen by negative change distinct from generation of light, but by positive generation itself without other change privation is corrupted, because privation is not removed except through positive being, therefore through generation, which is transition or change from non-being to being, from privation to form, although it is true that through our concepts we can distinguish in light the positive concept of constituting luminous, and the concept removing darkness or non-being of privation, because privation is taken by us as a being of reason, and so after the manner of being which is corrupted, in reality however that privation is non-being, and physically is not removed except through being, which all St. Thomas teaches in q. XXVIII On Truth, article vi, in the body.

Whence objections which can be made, from the fact that generation is sometimes given without corruption, do not obstruct, for we confess that corruption is not essentially annexed to all generation, but only to that to which positive form to be corrupted is annexed, and if the form to be corrupted were partial, then also corruption will be partial, and production congeneration. Nor did St. Thomas in II, distinction XXXIV cited above say that generation and corruption differ only in reason, but he said that the form of fire and privation of air are the same in subject, but differ in reason, which is to say that privation and form are not really distinguished, because privation is not a real extreme, not however to say that generation itself and corruption are not distinct changes in the way that has been said.

Objections are solved.

It is argued first: Corruption is privation at least on the part of the terminus ad quem, but generation is positive action therefore in no way can they be identified, for true reality cannot be identified with that which is nothing and a being of reason.

Second: Because by the same reason by which it is proved that generation and corruption are identified in the nature of motion and action, it is proved that they are identified in the nature of change, because just as the same dispositive action and motion suffices to primarily introduce form and secondarily destroy the opposite, so simple and unique positive change will primarily be transition to generated form, and secondarily transition of opposite form, for neither will it be repugnant for negative change to be identified with positive, just as negative action, that is, destruction with positive generation.

Third: Because if generation is identified with corruption it will be true motion, which however the Philosopher denies in Physics V, ch. 1, the consequence is clear, because insofar as it is identified with corruption, it has for terminus a quo something positive, and by reason of itself as it is generation, it has positive terminus ad quem, therefore at least identically it is between two positive termini a quo and ad quem, which is to be motion at least identically.

Fourth: If generation and corruption have order among themselves, it is necessary that it be founded in some causality or order of prior and posterior of one toward the other, but this is not given, because either they mutually cause each other, and this not because corruption cannot have causality in generation, since it is privation or they do not mutually cause each other, but one only is cause, and the other effect, and this not, because in the first place corruption cannot cause as has been said, and so it cannot itself be cause, and generation effect: and because otherwise it would be per se primarily intended, but generation as consequent. But if generation is cause and corruption effect, generated form will be received before the opposite is expelled, and so generated form will not be received in bare matter, nor supposing expelled form.

Finally: If the generation of one is the corruption of another, it is necessary that they be in the same instant, for if they are in diverse instants they are not identified, but this cannot be, because corruption holds itself on the part of ultimate disposition, which removes form incompossible with generated form, but ultimate disposition precedes form in the very subject in which corruption happens, therefore corruption is not identified with generation.

To the first it is responded that negation of another form can well be identified with some positive form, for privation and negation of diverse things are not opposed, but such negation is imbibed and identified with the very form in which it is founded, just as faith has obscurity, and heat privation of cold, and any thing negation of that which is distinguished from it.

To the second it is denied that it is the same reason concerning change and concerning motion, according as motion signifies action by way of influence, for it is not repugnant that the same action in number attain several termini having themselves in order or consequent, whether negative or positive, because it happens that action is virtually multiple, and extends itself to many things, just as the very power from which it proceeds. But change does not say something efficient, but pure transition between termini, and rather says something effected than effective, whence where there is distinct transition between termini, there is distinct change, but not where there is distinct effect even materially, is there distinct efficient action, but nevertheless that which has itself materially to the nature of action, nor multiplies it, has itself formally to the nature of change and multiplies it, because the formality of change consists only in that effected transition, as has been said.

To the third the consequence is denied, for it does not suffice for the nature of motion strictly so called, and as it is distinguished from change to have positive terminus a quo concomitantly and on account of adjoined incompossibility, but formally and per se. But substantial generation formally and per se is not from positive terminus, but from privation of form. But that it corrupts pre-existing substantial form is not because it has that for formal terminus a quo, for per accidens and materially it has itself to the form of fire which is generated, that it be made from straw, or paper, or wood but per se that it be made from non-fire; but nevertheless it corrupts preceding form whatever it may be, because forms are incompossible in the same subject on account of adjoined privation, because each is substantial form, and consequently first in the subject. Whence it does not admit another as second. However preceding form does not have itself as formal terminus a quo, for then it has itself as formal terminus a quo when it conduces to constituting positive distance or latitude between terminus a quo and ad quem, but then positive latitude and distance between termini is constituted, when they are positive and have medium, so that the very extremes conduce to such latitude, insofar as from their commensuration or conjunction medium is constituted, and per se they postulate transition from one form to another through such medium. But substantial forms do not have themselves as extremes, through whose commensuration or conjunction medium is constituted, nor per se is transition made from one form to another through some medium, but whatever form is immediately receivable in matter, if contrary disposition does not obstruct. Whence only by reason of disposition does it seek transition through some middle form.

To the fourth it is responded that between corruption and generation mutual order of prior and posterior is given, just as between expelled and generated form, for expulsion of corrupted form is prior in the genus of material cause, but generated form is prior in the genus of formal cause. Whence St. Thomas in question XXVII On Truth, article vii, says: "That expulsion of preceding form is naturally prior in the nature of material cause, for all disposition to form is reduced to material cause, but denudation of matter from contrary form is a certain disposition to reception of form." But that introduction of form is prior in the genus of formal cause he teaches in IV, distinction XVII, question 1, article IV, question III: "Because removal of form according to order of material cause naturally precedes introduction of form, but according to order of formal cause it is conversely." And he has the same in I-II, question CXIII, article VIII ad 1, because agent acts through form to remove contrary, just as the sun through its light acts to remove darkness, and therefore on the part of the sun it is prior to illuminate than to remove darkness, but on the part of air it is prior to be purged from darkness than to attain light in order of nature, although both are simultaneous in time. Therefore it must be philosophized concerning corruption and generation, just as concerning ultimate disposition and form as has been said above, nor is it required for that priority on the part of material cause, that priority also in existing be given, but it suffices that existence accompany, in reality, but in that priority only formality and office of that dependence and causality is explained. And although corruption is secondary effect of generated form, just as also ultimate disposition, in another genus of cause however, and under another respect, namely as it holds itself on the part of dispositive cause it can have mode of cause and priority.

To the last it is responded that generation and corruption are given in the same instant of time, but in diverse priority of nature. But ultimate disposition is not in some duration before generated form itself, nor in corrupted subject, although according to diverse priorities of nature it precedes and follows in the same generated subject, as has been explained above, and the very same must be said concerning corruption and generation.

ARTICLE III.
Whether corruption is natural and intended per se by nature?

We suppose from Physics II, ch. 1, that something is called natural because it has in itself the principle of its motion, or because it is from an intrinsic principle of nature, and the intrinsic principles are matter and form. But that is said to be according to nature which has itself as accidents and affections befitting nature, or is a subject whose being is from nature. But those things which befit from an extrinsic principle either befit violently or praeternaturally. This, therefore, we inquire about corruption, whether it befits by reason of some intrinsic principle, and so is natural, or by reason of an extrinsic principle, and so is violent and praeternatural. And there can be difficulty, because on one hand corruption has some repugnant principle, namely form itself, and the composite which is, is destroyed through corruption, and so corruption cannot be natural to it, but violent as destructive of it. But on the part of matter it is not inclined per se and directly to corruption, because corruption is evil and non-being, therefore it is not the terminus of appetite, therefore neither of matter, because matter is a certain appetite, and that is natural to it which is appetible to it. Therefore corruption is not natural from any part.

And from this arises a second difficulty, whether corruption can be intended per se by nature because evil as evil cannot be intended, but corruption is evil since it is a defect of nature, therefore it is beyond its intention, just as also monsters are not from the intention of nature, but deviate from it, as defects of it, but nature always intends what is due to itself, not what is alien and deviating.

NEVERTHELESS I SAY FIRST: Corruption is simply natural, and not violent from nature by reason of matter, insofar as it bespeaks corruptible nature, taking natural as it is opposed to violent. St. Thomas expressly holds this conclusion in I-II, q. LXXXV, art. vi, and q. v On Evil, art. v. But matter renders nature corruptible, both because it has in itself privation, with aptitude and potentiality for several forms, of which any one cannot fully satisfy matter, for this is the disposition of a corruptible thing, as St. Thomas teaches in I, q. LXVI, art. II. And because it admits composition from contraries, as is clear in all sublunary bodies, but every body composed of contraries is corruptible, since contraries act on each other, and so generate and corrupt, since generation and corruption is from contraries. Thus therefore St. Thomas founds that corruption is natural, both in the place just cited, and in III, dist. XVI, q. 1, art. I, since matter is endowed with such conditions, namely potentiality for several forms, and privation of some and reception of contraries, therefore it is natural to it to admit corruption of form, for where principle and root is natural, that which befits by reason of such principle ought to be natural, especially if this itself conduces to the common good, which cannot stand without generation and corruption of things.

Nor does it obstruct that what befits only by reason of passive principle does not seem to be natural, because its opposite is not violent, for nothing can suffer violence only by reason of passive principle, since it is not a principle resisting the agent. To these that consequence is not valid, root or principle is natural, therefore also act, for it is instanced in free will, which is naturally capable of sin since it is from nothing, and yet sin is against nature, otherwise sin would not be sin, therefore similarly although corruptibility itself is natural, it does not follow that corruption is not natural, it does not follow that corruption is not against nature. These, I say, do not obstruct. For to the first we said in q. ix of Physics, art. IV, that also passive principle is natural as opposed to violent, and has inclination to something from which if it is really removed, that something equally natural is not substituted for it, it will be said to suffer violence, and it has resistance to that not active but formal. And that passive principle suffices for the notion of nature, St. Thomas teaches in Physics VIII, lect. VIII, where he says: "It is against the intention of the Philosopher that in matter there be active principle, which indeed they say is necessary for this that there be natural motion, for it suffices that there be passive, which is natural potency to act." Therefore impediment of such inclination if it is totally frustrated will be violent to passive principle. But some are mistaken about the appetite or inclination of matter, which is to several forms to whose total collection it is adequately related, but to singles inadequately, and therefore when one form is removed in particular, it is not violated in receiving another, because both are equally natural, and therefore removal of one is not violent, since another equally natural is substituted, but if corruption of forms and reception of others were totally impeded, in this there would be violence to matter, because its natural tendency to several forms successively and with corruption of others is impeded. Indeed from this an argument is deduced, because therefore matter does not suffer violence in receiving one form and losing another, because it is in natural potency to all, therefore removal of one will not be violent, therefore it will be natural, for every motion happens either by nature or by force, as the Philosopher says. Therefore corruption is natural to passive principle, insofar as it is natural to it from proper inclination to have several forms, and not simultaneously, but successively, losing one and acquiring another.

To the third it is said that that consequence does not hold in voluntary defects which are sins, both because voluntary is opposed to natural, whence although the power of defecting freely is natural, just as will itself naturally befits man, nevertheless its act is voluntary and free on account of indifference of power; and also because sins are against nature as rational, not as limited and from nothing, whence simply they are said to be against nature, because they are against what is principal in nature, or proper to nature itself. But corruption is founded in natural inclination of matter to several forms, and in itself is natural and not violent, nor voluntary, and again although it is contrary to the form which is corrupted as to its being, and similarly to the composite from such form, nevertheless from another part it is ordered to the common good, which is perpetuated, and consists of several composites and things, of which one succeeds another, which happens through corruption of it, and so it is not contrary to matter itself, as it depends on the whole collection of forms, to which it can be subject, but is only contrary to one particular form which it excludes; but it is not connatural to matter to have being only from one form, but from many successively. But sin of will is not ordered to any common good like corruption of form, but is deordinated from it universally and from every part.

From which is deduced what we said in the cited place in question ix of Physics, that although corruption is contrary to form, and violent to it, and from this part corruption is not to be called natural, nevertheless because on the part of matter it is natural, it simply takes the denomination of natural, and not of violent, notwithstanding that these two reasons concur, because denomination is always made from that which more preponderates in some nature, but in this part that which holds itself on the part of matter more preponderates, because not only is it natural and befitting to matter itself, as it is disposed to one form that corruption of another happens, but also it conduces to the common good of corruptible things, which are coordinated from succession of generations and corruptions, and to the common appetite of matter itself insofar as it extends to all forms, which St. Thomas expressly teaches in q. 1 On Evil, art. III ad 18.

To the difficulties moved at the beginning. To the first it is responded that corruption has some repugnant principle on the part of form only by reason of its particular being, but it has another connatural principle on the part of matter insofar as from its nature it seeks succession in forms, and this itself is ordered to the common good of the whole order of corruptible things, and therefore it is simply denominated natural.

To the second similarly it is said that corruption is evil of particular form, but good of matter, and of common conservation of things. But nevertheless it is one thing to inquire how this corruption is natural, another how it is good and appetible, for this is not directly and primarily, since it is as privation; but that it be natural it suffices that it follow from some intrinsic and natural principle, whether it be according to the first inclination of nature, or according to the secondary as required, or annexed to it, and ordered to it; but that it be good primarily and per se requires positive entity, as will soon be further declared.

I SAY SECONDLY: Corruption is not intended by a particular agent, as it is a particular agent, neither immediately nor mediately, neither by reason of itself nor by reason of an adjoined order to good, but in respect to that order it is related accidentally. But in respect to the universal agent ordering and providing the whole good of nature, such defects are of its intention not primary but secondary, supposing however that order to the common good. In the first part of the conclusion not all agree but some think such evils and defects can be of the secondary intention of particular nature, and not be entirely accidental, for St. Thomas seems to insinuate this in IV, dist. XXXVI, q. 1, art. I ad 2, where however he speaks of nature according to itself, and as it universally extends to particular or universal agent, as we will soon explain, and in the same way he also speaks in q. XXIII On Truth, art. II.

For understanding of the conclusion however it must be noted, that in some evil or privation we can find three things. First, the good itself on which evil or privation is founded, as subject, or holding itself on the part of the subject. Second, evil itself formally, or privation according to itself. Third, some order to good, which follows from such privation, not per se, that is, insofar as it is evil and defect, but as it serves some good, which cannot stand unless such evil intervenes, just as there cannot be acquisition and generation of terminus ad quem, unless terminus a quo is corrupted and ceases, nor can someone's fortitude be shown, unless persecution of another is applied. It is therefore certain, that privation itself, or evil per se, and by reason of itself cannot be something intended, because it lacks in itself the formal reason by which it can be intended, namely good, for everything which is intended and desired ought to be intended as good and as befitting, therefore what lacks this formal reason, according to itself is not intended, but if it is intended, it will be through another, which is adjoined to it, and by which it is clothed, whence it is intended not primarily and per se, but secondarily and accidentally. But nevertheless this itself, which they have accidentally or through another, and by reason of which they can be intended does not pertain to every agent, nor to everything intending, because not every agent regards more universal reasons, but particular agent regards only particular reasons not common, and therefore they are passed over by it, and only because they are accidentally conjoined to that thing which is attained by it. But the agent which regards common and universal reasons, that which in respect to particular agent is accidentally touched, and per se omitted can regard as conducing to its more universal end, and so can fall under its intention at least secondarily.

From this doctrine various places of St. Thomas which speak of this matter are composed, and truth itself is elicited, how corruption has itself accidentally and how it can be intended. Sometimes the holy doctor affirms that corruption and other defects fall under the second intention of universal agent, as in I p. q. XXII, a. II ad 2: "Corruptions," he says, "and defects in natural things are against particular nature, but nevertheless they are of the intention of universal nature insofar as defect of one yields to the good of another, or of the whole universe." He teaches the same in III against the Gentiles, ch. XCIV, near the end, and ch. LXXI, and he means entirely the same and no more in that dist. XXXVI cited, and q. XXIII On Truth, for he speaks of nature absolutely, not distinguishing about universal or particular nature. But sometimes he affirms that similar defects are entirely willed accidentally even by God, namely by reason of that good to which they are conjoined, as is clear in I p. q. XIX, a. IX and in q. XLIX, a. II, where he says: "That God in causing good of the order of the universe in things consequently and as if accidentally causes corruptions of things." And finally in III against the Gentiles, ch. IV, V and VI he seems to intend that evil is always beyond intention.

But these cohere thus, that these natural defects taken according to themselves are certain privations and evils, according to which consideration they have themselves accidentally both in respect to particular and universal agent; for evil under the aspect of evil cannot be willed, nor intended, since it is not appetible, but to be fled from by appetite, but only accidentally can it have itself in respect to one operating, insofar as either it permits it, not indeed by desiring, but by not impeding, or insofar as it can be desired through another, that is, as it puts on some aspect of good, or some order to good, whether to common good, or to particular good, and so it can fall under some volition, or intended permission. This intention however does not pertain to particular agent, because it pertains to it to intend only its terminus ad quem, but whatever holds itself on the part of terminus a quo, is in no way intended, but is relinquished, nor even secondarily, because that it be intended secondarily, it ought secondarily to hold itself on the part of terminus ad quem; but corruption precisely holds itself on the part of terminus a quo in respect to particular agent, therefore in no way can it fall under its intention, but is only accidentally compared to it. But universal agent although insofar as it concurs with particular agent for its generation it also regards corruption as terminus a quo, nevertheless on account of its universality it can according to another reason attain that which is terminus a quo as terminus ad quem, as something required for common good, even as to its corruption, like God who attains every creature, as terminus ad quem, and for terminus a quo has only nothing, whence he has to dispose of every creature, whether as to existence, or as to corruption, whence corruption in respect to him does not have itself accidentally as omitted, but can be intended at least secondarily, as it puts on some order of good, and not purely as privation has itself. But concerning other defects, which follow from necessity of matter we will speak in the third conclusion. And thus St. Thomas concludes in I q. XIX, art. IX, that God wills evil of natural defect, or evil of punishment by willing some good, to which such evil is conjoined. This therefore is to be of secondary intention, namely not to be able to be intended unless some good is presupposed, which the thing does not have in itself, but from something to which it is adjoined.

You will say: Therefore there is no difference between evil of fault, and of punishment in respect to the will, and providence of God, since even evil of fault itself can be ordered to some greater good, suppose to humility, or penance of this person, and yet St. Thomas posits a difference between natural defects, and evils of fault, that God in no way wills evil of fault, because he does not will the good to which it is conjoined more than Divine goodness itself to which it is contrary, but evil of punishment he can will by willing some good to which it is conjoined.

It is responded that there is a wide difference between evil of fault, and of punishment, because although it imports privation, and defect, which cannot be ordered except from conjunction to some good, nevertheless because privation of evil of fault is opposed to ordination to Divine good, it cannot be conjoined to any good, by reason of which it can be willed and ordered, because every good ought to be willed through subordination to the Divine, for God only wills all things under the aspect of Divine good, and therefore such evil can only be permitted, that is, not impeded by God, and permission itself can be ordered to good. But evil of punishment or natural defect is not opposed to Divine good, but to some particular good, whence it can put on order to some good, which more preponderates, and is loved, than that particular good which it destroys, and so by reason of this order, or good to which it is conjoined, it is not repugnant to be intended, and ordered by God, and not only permitted.

I SAY THIRDLY: Monsters, and other natural defects which follow the disposition of matter, from which something is generated in respect to particular agent, are sometimes fortuitous, and in no way intended, sometimes secondarily willed; but in respect to universal agent they can be intended. Concerning this conclusion the holy doctor should be seen in III against the Gentiles, ch. V, where he says: "If there is such a privation which deprives what is due to the generated thing, it will be by chance and simply evil as when monstrous offspring are born, for this does not follow of necessity to what is intended, but is repugnant to it, since the agent intends perfection of the generated thing, but evil of action happens in natural agents from defect of active power. Whence if the agent has defective power, this evil follows beyond intention, but will not be by chance, because of necessity it is consequent to such an agent since such an agent, either always or frequently suffers this defect of power, but it will be by chance, if this defect rarely accompanies such an agent." Thus St. Thomas. Wherefore particular agent, because it intends only particular good, and acts according to particular form, intends only to make its effect in the best way it can, and so from its intention only perfection of effect is given, and perfect assimilation. But that its power is deficient, or matter is unduly disposed, this is beyond its primary intention, because it does not pertain to its form to dispose and order such indispositions or defects, but rather to remove them as much as it can. But nevertheless if it cannot remove all, and yet operates and defect follows, sometimes it follows entirely beyond the intention of such particular agent, and so they have themselves by chance, as are those things which happen in fewer cases, for these are by chance, and entirely beyond intention. But sometimes defects follow not entirely beyond intention, but from secondary intention, which is rather non-refusal of that defect, than positive intention of it; as when there are defects happening to matter of necessity or perpetually, as an artificer who wishes to make a sword chooses hard matter as iron, and this per se, but because rust follows iron, and this does not conduce, but rather falls short of his end, he does not choose it from primary intention, but because he does not find suitable matter without such defect, he chooses from secondary intention matter with it on account of adjoined hardness, which befits his end; and similarly nature in human body chooses suitable matter for operation of senses, and so it ought to be composed of contraries, but because from that contrariety follow diseases and old age, and other defects they are beyond the intention of the generator, but from that suitable matter is not found without those defects, he chooses with them at least from secondary intention, for these because they befit the generated thing itself on the part of matter, and dispositions, which follow it can be regarded on the part of terminus ad quem as befitting the generated thing itself from necessity of matter, from which it is formed, therefore they can pertain to intention at least secondary, because they are of necessity consequent to chosen matter, for it is chosen with such conditions because those conditions are not chosen, but because they are not refused, and so in some way they are attained secondarily. And for this reason also female is customarily said to be something occasioned, because it is beyond the intention of particular agent, which intends the better effect which it can, namely male, but that more deficient follows, namely female, is beyond its intention on account of indisposition of matter, or active power, as St. Thomas teaches in I p. q. XCII, a. I ad 1 and against the Gentiles ch. XCIV and q. V On Truth, art. IX ad 9.

But in respect to universal agent, namely God none of these is beyond intention, because he regards more universal ends, and order of the whole common good, to whose variety, and construction pertain also those things, which in respect to particulars seem imperfect or defective, or monstrous, just as that there be females, is necessary, on account of multiplication of men, and manifold operation and power of nature appears also when there is error in disposing matter, and monsters happen; as many species of things are manifested from monstrous mixture of seeds in fishes and in animals, and other similar things, all of which are intended by God not only on account of necessity of matter to which those defects are consequent, but on account of common good, which is manifested, and coalesces also from those things which only from something presupposed, and accidentally, or through another have aspect of good.

From which response can be made to whatever objections, which are customarily made, from the fact that sins, and evils and defects are not intended, for that has already been solved from what has been said, and it has been shown how some things can fall under intention at least secondary, because they hold themselves on the part of the generated thing, although by particular agent they are intended only on account of necessity of matter, but by universal agent on account of conduciveness to common good. It has been shown also how some things are relinquished accidentally, and permitted, like corruption in respect to particular agent, because it holds itself on the part of terminus a quo and aversion from Divine good in sin, because it can never be subordinated to Divine good, under which Divine will attains all things. Finally, it is clear how matter is inclined to corruption, namely by reason of generation, that is, that it can fulfill potentiality to all forms. Whence matter even singular, and individual considered according to common potentiality to all forms, and as it is subject to universal agent, who created it, can intend secondarily corruption, because it pertains to its good secondarily, and on account of succession of forms. But the same matter, as it is subject only to one form, and to particular agent, which intends only that form, does not regard corruption except accidentally, and on the part of terminus a quo.

QUESTION III.
ON ALTERATION IN COMMON.

After explaining the nature of generation, and corruption, it follows to treat of alteration, which is most close to it, and more serves it. And first, alteration is to be considered in common, as it comprehends under itself simple motion of alteration, intension, and remission, and other modes of alteration, or actions, which happen through alteration, as mixture, and condensation, and similar things. Second, in special we will consider concerning these species of alteration.

Concerning the first three things occur to be considered. First, what alteration is. Second, to what terminus it is. Third, whether it is continuous motion. But concerning the subject of alteration the question is common, as concerning other accidents, and therefore in question nine it will be treated by us.

ARTICLE I.
What is alteration, and how many kinds are there?

The name alteration is derived from "other", for it is said as if making something other. But as is said in the chapter on difference, it is one thing to be other, another to be another. For "other" indicates accidental difference, "another" substantial. And so we can take the name of alteration most commonly for every accidental change in whatever genus of accident, but we are not speaking at present of alteration taken so universally. More strictly therefore it is taken for change in quality, for in quantity and place there are peculiar changes, namely augmentation and local motion: but in qualities especially something becomes other, especially when through them it is ordered to some corruption, for corruption especially makes something other. Whence taking still the whole predicament of quality, it is necessary to distinguish that some are spiritual, some corporeal; and some natural, some intentional; some having contrariety, some not. And those which are spiritual, as intentional, or not having contrariety, are not ordered to physical corruption or generation, and therefore although they can be called alterations in a broader name, nevertheless they are not called physical alterations, about which we are chiefly treating at present, because they are not ordered to corruption and generation.

But concerning qualities also having contrariety one can proceed in two ways, either by way of change, or by way of motion; by way of change, when one proceeds from privation to form, as from not-white to white, which is accidental generation, and then it is not from contrary to contrary, although the quality itself has a contrary; by way of motion when one proceeds from positive terminus to positive terminus according to latitude and distance from one to another, for it is manifest that this is given in qualities, as we showed in question XIX of Physics, like heat and cold, whiteness and blackness, and other similar things, and then there is true contrariety; and similarly according to more and less in the same quality positive distance is given, and latitude from positive to positive, and all this happens with the same sensible subject remaining, therefore it has all conditions required for motion strictly so-called, as it is distinguished from change; and about this we are chiefly treating at present.

This supposed, that alteration which is motion is thus defined by Aristotle in this first book, text XIII: "That alteration is when the sensible subject remaining is transmuted in its passions, or contrary middle motions." From which some thus elicit the definition of alteration: That alteration is motion to sensible quality middle or extreme, or to quality having latitude of contrariety. It is called motion to exclude instantaneous changes, among which the principal is generation itself. It is called to quality, to exclude other species of motion, which are concerned with quantity or place. It is called sensible quality, to exclude motions which happen concerning spiritual qualities as concerning habits or acts. It is called middle or extreme, that is, having contrariety and latitude to exclude those qualities which do not have contrariety as light, figure and other similar ones. Wherefore although other changes to quality can be called alterations in a broad way, and are reduced to them, nevertheless properly alteration regards contrary and corruptive qualities, because from its nature alteration serves generation and corruption, as its instrument, and is concerned with qualities serving generation and corruption, which are contrary qualities; and so Aristotle in this book, lect. 11, in St. Thomas makes this consequence against the ancient Philosophers, that if it is impossible for fire to be made from water, and one element from another, it will also be impossible for black to be made from white and similarly from other qualities, and thus generation being destroyed alteration is destroyed, therefore alteration is ordered per se to generation. Wherefore St. Thomas rightly in I, dist. XV, q. II, art. I, q. 1, gathering all conditions of alteration says: "That for this that alteration is required on the part of what is altered, that it be a thing subsisting per se, otherwise it cannot be subject of motion, and that it be body, because only such is moved, and that it have nature subject to contrariety, because alteration is motion between contrary qualities." But on the part of termini it is required that one quality being expelled, another is introduced, for thus transition is made from quality to quality.

From these the difference of alteration from generation, and from the rest of motions is drawn. For it differs from the rest of motions on the part of terminus, because augmentation is to quantity, local motion to where. But from substantial generation it differs, both on the part of terminus, because it is to substance, and on the part of subject, because the subject of generation is prime matter, but of alteration sensible subject, or informed matter, and on the part of change, because generation is instantaneous, but alteration successive, and on the part of terminus a quo, because generation is from privation, alteration from positive and contrary terminus. Finally it differs from generation secundum quid, because that does not happen through motion, nor from positive terminus, but privative, as when white becomes from not-white.

But you will object: To prove that alteration is not ordered per se to generation, for production of whiteness, and of other colors is true alteration, and is not ordered per se to substantial generation. Similarly acquisition of figure, and illumination, and obscuration are alterations, nor nevertheless are they ordered per se to substantial generation. It is confirmed, because otherwise if substantial generation were not possible, alteration would not be possible, since it is essentially ordered to it, the consequent is false, therefore. The minor is proved, because alteration does not depend per se on change of substance, although it depends on substance as on subject, as is clear in incorruptible things, as in heaven, in blessed bodies, and in the damned after the day of judgment, in which generation and corruption is not possible, and nevertheless alteration will be given as in heaven illumination, and obscuration, condensation, and rarefaction, for some parts of heaven are denser, others rarer, indeed and breaking will be able to be given, since speech by the blessed in heaven cannot happen except through breaking of the heavenly body itself, as St. Thomas admits in II, dist. II, q. II art. II, for there is not air there, which is broken, when voice is formed, nor will that be able to be formed without some condensation of broken body, because the divided part is not penetrated with another, but is condensed. In blessed bodies there will be respiration, speech, touch, and taste, which do not happen without alteration. In the damned there will be heating, and cooling, by which they will be tormented, therefore alteration will be given without order to generation. Finally, if men were from eternity, generation could not be in them, as we proved in VIII Physics, and nevertheless in them alteration is given, because they would be nourished, and breathe, and speak, etc. therefore not every alteration is ordered per se to generation.

It is responded that alteration which is motion, and is concerned with contraries, is ordered per se to generation, as has been said. And to the proof to the contrary, as pertains to whiteness, and other colors we say, that although immediately they do not serve generation as active dispositions of it, nevertheless they can be ordered mediately, and in their cause, because these colors are caused from temperament of primary qualities, which conduce more immediately to generation and corruption, and therefore colors as consequent from such qualities, are also ordered mediately to generation, and in their cause. But acquisition of figure sometimes happens through alteration, as when from rarefaction, or condensation, or from another quality parts are so changed, that they lose and change figure, and then such acquisition of figure will pertain mediately to alteration, and in that way also will be ordered to generation. But sometimes change of figure happens through local motion alone, as when through division, or conjunction of parts through local motion new termination of quantity happens, and new figure results, and then since it does not follow alteration, neither will it be ordered per se to generation. But concerning illumination, and obscuration we have already said, that it is not alteration strictly so-called, but in a broad way, and so is not ordered per se to generation like alteration, which is per se between physical contraries.

To the confirmation the minor is denied, for alteration not only requires substance as subject, but also requires change of substance, because it is a certain beginning of substantial change, because substance depends in its conservation on accidents as on dispositions, whence removal of dispositions is initiation of corruption. To the proof it is responded, that in heaven alteration strictly so-called, which is between contraries, is not given, for illumination and obscuration is not of itself corruptive alteration, although accidentally in inferior things, insofar as it depends on influences of heaven, which act through light, alteration of corruptive qualities in these bodies follows from them. But condensation, and rarefaction in the heavens is not given, for although some parts are found denser, namely starry, others rarer, namely diaphanous, nevertheless they have this from the beginning of their creation, like other proper accidents, but they do not now acquire it through alteration.

To what is adduced concerning bodies of the blessed, it is responded that all those things happen without motion of alteration, for respiration, and speech happen through local motion of emitting air, and striking; nor will respiration be necessary for the blessed on account of refrigeration of the heart that heat may be tempered, as in us, because those bodies since they are incorruptible, are not changed through alteration of heat. But for speech it suffices to strike air and divide by local motion. But how this happens in heaven, is very difficult among Theologians, supposing incorruptibility of heaven, about which in the books On Heaven. For what is adduced from St. Thomas, concerning breaking of heavenly body in speech of the blessed, the holy doctor does not say this from his own opinion, but supposing the opinion of others, that in heaven there can be condensation, and rarefaction, which nevertheless he says befits heaven equivocally. But it seems more probable that voices are to be formed in air existing in the throat, and mouth of the blessed about which, Psalm CXLIX: "The high praises of God in their throat", nor is it unfitting that some air enclosed in bodies of the blessed ascend above heaven, although it is elemental, just as blessed bodies themselves virtually contain elements, because they are mixed, but that air although it is incorruptible just as also other elemental bodies after the day of judgment, from defect of motion of heaven, will nevertheless be able to be condensed, or rarefied through compression, or dilation of parts made through local motion without other alteration, just as also if then water is moved, its parts will be compressed without alterative condensation, or we will explain more broadly below q. VII. But voice being formed in that air will be carried to the hearing of another blessed through heaven as through medium according to intentional species, not according to physical alteration, or breaking of heavenly body through sound. The rest of alterations in blessed bodies concerning passions, and sensations will be only animal actions of senses according to intentional species or elicited acts, but not natural and corruptive alterations, as St. Thomas teaches in IV, dist. XLIV, q. II, art. I, q. I ad III.

Concerning bodies of the damned we say, that they will suffer not through natural alteration, which then will entirely cease with the first alterant ceasing, which is motion of heaven, in whose power other inferior things alter, but through intentional alteration through emission of species, which then will not cease, because they do not depend on motion of heaven, but on light, and other intentional qualities, so infernal fire through tangible species will cause maximum sensation of itself in those bodies, about which let St. Thomas be seen in IV, dist. XLIV, q. III, art. 1, q. I and III. Concerning man created from eternity we say that just as he would lack generation through infinite time, so also he ought to lack motion of alteration through the same time, and change, which happens through some generation.

Finally you will object: For quality has a simple essence consisting in the indivisible, therefore according to its essence it cannot terminate motion, which is divisible, but change, but it will be able to terminate motion only by reason of some degree according to more or less, which does not pertain to alteration, as it is alteration, but as it is intension or remission. But the antecedent is manifest, because quality has species consisting of genus and difference, which is varied by any addition or subtraction: therefore it itself consists in the indivisible.

It is responded, that as St. Thomas says in I-II, q. LII, art. I, quality or form can be considered in two ways. In one way according to itself; in another way in order to subject, not that in reality form is without subject, but because there is diverse consideration of form, either according to itself absolutely, or comparatively to subject. And in the first way its species, and essence is said to be indivisible, but in the second way it has divisibility, by reason of which it can happen through motion. But this is well understood in respect to intension, and remission, which, as we will say in the following question, befits qualities through comparison to subjects; nevertheless in respect to quality itself as absolutely and entitatively it is acquired, the proposed difficulty seems to run how indivisible form in its species and essence is acquired through divisible mode. It is responded therefore, that when the species itself of something essentially imports contrariety and distance or latitude in respect to another opposite, then although formally it consists in the indivisible, insofar as all predicates essentially befit it, and in this mode of befitting nothing can be added or subtracted, nevertheless comparatively to opposite terminus, it founds and admits latitude and contrariety, and transition not only from privation to another; sign of which is, because through addition or mixture of one form with another variation of species happens, and some intermediate form results or several intermediates, which constitute latitude and distance between extremes. By reason therefore of this latitude, and contrariety between some forms, through divisible motion quality is acquired, which although it is indivisible in the formal aspect itself of constituting species, and its essence absolutely, nevertheless in comparison to its opposite, has divisible mode of acquisition. And because that opposition and contrariety is exercised between forms through comparison to subject, therefore still in respect to acquisition of quality through alteration, the saying of St. Thomas is saved, that quality is indivisible according to itself absolutely, but divisible through comparison to subject, as namely in it contrariety is exercised.

Concerning the second point, namely how many kinds of alteration there are, it is responded that alteration is generic motion to three species of alterative motion, namely simple alteration, intension, and remission. Simple alteration regards the substance itself of quality, as to be acquired by motion, namely from some positive contrary. Intension regards augment of quality according to greater degree, or more perfect, but remission diminution according to more imperfect degree. And this is so, because a triple mode of latitude, and distance is found in quality; for latitude can be considered, either between diverse species of quantity, or within the same. Between diverse, as between heat and cold, and other contrary qualities, and so process from one to another founds motion of simple alteration. But within the same species greater or lesser participation of the same quality is found in subject, which constitutes diverse gradation, and latitude according to more or less, therefore diverse motion is founded proceeding from lesser to greater degree through augment; and from greater to lesser through decrement, and the first is called intension, the second remission.

But if other species of alteration are given, as mixture, condensation and rarefaction, and other similar ones, it is necessary to note, that these are not species dividing alteration according to formality of motion, that is, according to diverse mode of latitude and distance, but according to specification taken from the part of terminus ad quem, just as condensation, because it produces density, and rarefaction rarity, and mixture tempered quality, differ among themselves, just as also heating and cooling differ, and other alterations on the part of diverse termini from which they are specified, although because mixture and condensation and rarefaction are more common and have special difficulty, therefore they are treated specially in this work.

You will say: Why similarly will not triple species of motion be given in quantity, namely to quantity according to itself and to its augment, and to decrement, and similarly in local motion to where according to itself, and to ascent and descent. If it is said, that where is always acquired under some mode of situation, either straight, or circularly or curved, and therefore motion is not given to where separately, against this it is, because also quality is never acquired except under some degree either intense, or remiss, therefore similarly distinct motion is not required to quality, and to its intension or remission. It is confirmed, because in qualities we find other motions, besides these three, namely motion of extension toward diverse parts in corporeal qualities, or toward diverse objects in some habits, therefore this division is not adequate.

It is responded that there is diverse reason concerning quantity and quality, both because quantity does not have contrary parts between which transition happens from one to another through motion, because its species are line, surface, and body, between which there is not contrariety, nor motion passing from one to another, indeed all are required per se in any part of the continuum; and also because quantity when it is first produced, follows matter or corporeal substance through mode of emanation; but when some quantity being presupposed, another part is added or taken away then it is augmentation or diminution, and so there is no place for motion to quantity according to itself; finally, because every physical motion supposes quantity, since it happens according to contact, and divisibility, therefore it supposes divisible and tangible subject, which imports quantity. Similarly it is said concerning where, that there is diverse reason, because within the same where latitude and distance is not given that it become greater or lesser in the nature of place, because adequate place is to the located, and so unless the located grows or decreases, place does not grow, but augment, decrement of the located does not pertain per se to local motion, as it is acquisitive of such where. Therefore latitude and distance is given only between one and another where, or between diverse places. But in quality not only is latitude given between two contrary qualities, but also within the same it can grow more or less, and so it was necessary, that motion of intension and remission be given in the same quality and of simple alteration between diverse ones.

To the confirmation it is responded, that that motion, by which some quality is extended through subject, is not motion distinct from any of the aforesaid, for since that extension happens through multiplication or production of similar quality, not through transition from subject to subject that extension of quality to distinct part of subject, has itself just as production of new quality, which if it happens from contrary to contrary will be alteration, which is motion, if from privation to form it will be generation of accident through mode of change. But when some quality is extended to new objects, as happens in habits diverse difficulty is found in attaining one inadequate object, than another, this does not happen through physical alteration strictly so-called, about which we are treating at present, but is alteration speaking broadly, which happens through intentional action, or appetitive, insofar as on the part of habit itself, and not only on the part of the one operating, or application of matter distinct difficulty is given in attaining one object, than another. And in the opinion of some this does not happen according to perfection of the same quality, but according to formal addition, and congeneration of partial habit to pre-existing habit, and then there is no other difficulty in extension of that quality, than in extension, which happens through diverse parts of the continuum, for in both cases new part of quality is produced, although extension of habits is concerned with diverse inadequate objects, for example, with diverse conclusions within the same science. But in the opinion of St. Thomas I-II, q. LIV, art. IV, which we explained in Logic, q. XXVII, last article, through this extension new formal addition does not happen through production of new entity and quality, but it is virtual addition, insofar as the same quality or habit under the same formal aspect is more explicated and extended to object, to which before it did not extend itself, which is to acquire new mode of perfection, not new entity, and therefore such motion, since it is not alteration properly so-called, it is not surprising, that it does not constitute distinct species, but is reduced to intension, although it is not intension according to more or less concerning the same, but according to extension of the same concerning inadequate objects.

ARTICLE II.

To which species of quality is alteration given per se?

Aristotle treats this difficulty in Physics VII, chapter 3, and it is discussed there by many, however this seems to be its proper place, where alteration is treated ex professo.

It must therefore be supposed that in the predicament of quality four species are found, or four divisions of species, which we explained in Logic question XVIII, namely habit and disposition, potency and impotence, passion and passible quality, figure and form, about which can be seen there, and we inquire, which of these species are capable of terminating alteration first and per se.

Then I suppose, that for alteration to be given first and per se to some quality, is nothing other than for alteration so to attain some quality as terminus, that no quality mediates or any other terminus, to which such action is first terminated, but then motion is given secondarily to some quality when through another more immediately touched mediately and secondarily another is attained, as, for example, by attaining and changing heat, or cold, as immediate terminus, health, or sickness is attained as resulting from temperament of cold, or heat, and so we inquire, whether all these species of quality, or only some is that, which immediately, and per se is attained by alteration, or truly only some of these can be immediately attained, but others secondarily, and mediately, and if only some immediately terminates alteration, which that is.

Let there be one conclusion: Physical alteration according as we speak of it at present is only to the third species of quality per se first, that is, to passion, or passible quality. And Aristotle, in the cited place Physics VII, where also St. Thomas can be seen, and in I On Generation, lect. X, and in I-II, q. LII, art. I ad 3. And we speak of physical alteration, to exclude alteration broadly taken, which also comprehends instantaneous changes, and spiritual actions, or animal, which are concerned with habits or acts, nor are ordered to generation, and concerning these alteration broadly taken can be given, which is production of quality. And we say first, and per se, because secondarily, and consequently physical alteration can well be given concerning some habits, or dispositions, which are of the first species.

The foundation of this opinion is twofold. First, because physical alteration as has been said per se, and essentially is ordered to substantial generation, and to corruption, but substantial generation, and corruption requires contrariety in dispositions, if indeed through contrariety of dispositions expulsion happens, and introduction of forms, therefore it is necessary that alteration serving generation first, and per se tend to contrary qualities, but contrary qualities by physical contrariety, first and per se are found in the third species of quality, as is clear, both in qualities, which are first contrary, as heat and cold, dryness and humidity, which are qualities of the third species, and similarly qualities, which result from these as middle qualities, and having contrariety among themselves, which all pertain to the third species; and also because those qualities, which have physical contrariety first and per se, make transmutation of subject, which is especially transmuted from contrariety of qualities, and similarly per se change senses according to contrariety which they induce, therefore per se they have to induce passion transmuting subjects, or sense, and this is what constitutes the third species of quality, which therefore is called passion, or passible quality, because either transiently, or permanently it transmutes subject, and changes sense, and as St. Thomas says in I p. q. XCXVII, a. II, passion properly so-called is, through which something is removed from its natural disposition, therefore alteration which first and per se is concerned with physically contrary qualities, that it may thus be ordered to generation, directly only regards the third species of quality, which per se first makes transmutation in subject, and in sense through passion.

The second foundation is taken from the Philosopher in Physics VII, ch. III discoursing through all species of quality, in which physical alteration is not given first and per se. But briefly it is proved, because habits, or dispositions are either spiritual, or vital and pertaining to apprehensive powers, or appetitive, or are purely corporeal, as health or beauty. If they have themselves in the first way they do not pertain to the present, because they are not acquired through physical alteration, about which we speak at present, but through spiritual action, or animal, although presuppositively some alteration of primary qualities is also prerequired for these dispositions, or habits, namely in that, in which appetite, or phantasy depends on some disposition of organs, which happens through corporeal qualities. But if habit and disposition is purely corporeal, it also cannot first and per se be acquired through alteration, because such dispositions import some conveniency, or disconveniency to subject arising from some temperament of primary qualities, as is clear in health and beauty, therefore alteration is first terminated to those primary qualities, and mediately to health, or beauty. And in this consists the force of Aristotle's proof in the cited place, while he says, that to habit and disposition alteration is not given per se, because they have themselves to something, but motion is not given per se first in to something, as is proved in Physics II, which is not to be so understood as if disposition, and habit consisted in predicamental relation, which alone cannot terminate motion per se; in this however they are compared to predicamental relation, because just as relations follow from foundation, and therefore motion is terminated first per se to foundation itself, but to relation consequently, so because these corporeal dispositions result from due commensuration, or proportion of qualities, that which is first attained through alteration, will be that quality as proportioned, or tempered, but consequently befitting disposition itself, or unbefitting.

As pertains to the second species of quality, namely potency and impotence, it is clear, that it does not terminate alteration first and per se, not only in spiritual powers which physical and corporeal alteration does not attain, but also in natural powers, both because latitude of contrariety is not found in powers just as neither is found more, or less by reason of itself precisely; and because powers are innate principles, as proper passions emanating from nature itself, therefore they are not acquired through alteration first and per se, but follow upon generation. Concerning this however see what we say in the following question, art. 1.

Finally, in the fourth species namely figure, and form, physical alteration is not given per se first, both because figure does not admit latitude of contrariety, but has itself like number, because by any addition, or subtraction it is varied, and so does not have latitude; and because figure results from termination of quantity, and so sometimes is produced to production itself of quantity in the first generation of thing, as when someone is born with such, or figure; but sometimes truly it results from division of quantity, and then also it does not terminate alteration, finally sometimes it follows from some alteration, as from too much density, or rarity, or something similar, figure itself is changed, and then not first, and per se does it terminate alteration, but alteration is terminated first and per se to that quality, from which change in termination of quantity follows.

You will say: This discourse proves too much, for it follows from it, that to some middle qualities, which result from first ones, alteration cannot be given first and per se as to heat green, or red and other qualities, which result from cold and heat, and nevertheless pertain to species of quality as density and rarity, and other similar things, to which however alteration is given per se first.

It is responded that there is diverse reason, because these second qualities, which result from first ones can also per se terminate alteration, nor are they attained by the same motion first and per se terminated to another quality, and secondarily to themselves, but they require distinct motion besides that, which is terminated to primary qualities; both because sometimes they happen without alteration toward those, as when something is whitened, or blackened without any cold or heat preceding; and because when these colors happen from temperament of primary qualities, they happen through mixture, like other secondary qualities, but in mixture miscible qualities are corrupted, and so one third is made, whence it is necessary, that alteration does not stop in primary qualities, as in terminus, but consequently second ones result, but rather, that first ones are destituted, and as to terminus ad quem alteration tends to second which is mixed from those, and therefore alteration is given per se to it. It is otherwise in corporeal disposition as in health, which is not mixed quality resulting from corruption, or mixture of primary ones, but from proportion, and commensuration, for health does not corrupt heat, nor cold, but has them commensurate.

Arguments are solved.

It is argued first: To prove that alteration is given per se to the first species of quality, for when health, or beauty is acquired, it is acquired by some special motion, or change, for change from sickness to health, which is healing, is other than from cold to heat, which is heating; diverse contrariety is also found between sickness and health, than between heat and cold, and diverse terminus a quo and ad quem; therefore all requisites are given that distinct motions be given, especially, because that change or action, which is identified with health, is not identified with heat, and such motion, or change, as to health precisely is nothing but alteration, nor can it pertain to another species of motion, therefore alteration is given per se first to the first species of quality, at least in that way in which alteration is given to secondary qualities, or mixed, although they result from primary ones. And it is confirmed, because in the first species of quality intension, and remission is given properly and per se, therefore also alteration, since intension and remission are species of alteration, as we said in the preceding article. True contrariety is also given in it, as between error and science, vice and virtue, health and sickness, but where there is contrariety first and per se, there is foundation of motion first and per se.

It is responded by denying, that if diverse change formally to sickness or health than to primary qualities, from whose proportion, or disconveniency they arise; and that contrariety between sickness and health, and diversity of terminus a quo and ad quem all has itself consequently, and is materially diverse in respect to alteration, which happens to the third species. Which is deduced from the reasoning of St. Thomas in I-II, q. LII, art. I ad 3, where he says: "That alteration first indeed is in qualities of the third species, but in qualities of the first species alteration can be posteriorly." And he adds the reason: "Because alteration having happened according to hot and cold, animal follows to be altered according to healthy and sick." Therefore although health, and sickness is attained by force of some change, which indeed in reality is alteration, nevertheless because it is not attained as terminus first, and per se touched, but as consequent, since it always ought to happen through some alteration of heat, or cold, or other primary quality, therefore that change as it touches health, and is identified with it is not first and per se physical alteration, nor health per se immediately touched, but consequently, and therefore rather from the argument itself it follows, that alteration is not given first and per se to these dispositions, but consequently. It is otherwise concerning middle qualities of the same third species, which result from mixture of primary qualities, and so require distinct motion terminated to middle qualities themselves, and corrupting and mixing primary ones, which does not happen in acquisition of health, or as has been said.

To the confirmation it is responded that physical and corporeal intension and remission are species of physical and corporeal alteration, but thus they are not found in habits, and spiritual acts; whence neither in them is physical alteration given, about which we speak at present, and similarly contrariety, which is given, is not physical or corporeal contrariety, but commonly so-called and which is not ordered to generation and corruption.

It is argued secondly: For in the second species, which is potency and impotence, true alteration can be given, for potency can be weakened, and rendered impotent through some new transmutation, as sight, which is acute and vigorous in youth, can become weak in old age, and intellect also can be dulled, and rendered impotent from some accident, but these transmutations cannot pertain to another species of motion, than to alteration, therefore alteration can be concerned first and per se with potency, and impotence.

It is responded that potency which once emanated from nature as from proper subject cannot be removed except either through opposite impotence or through extrinsic impediment. In the first way it cannot happen, one and the same nature remaining in the same state, for neither can from the same nature, now potency emanate, now impotence as from man risibility, and irrisibility. But if for diverse states it would emanate from the same nature, now potency, now impotence, as diverse passions are accustomed to befit for diverse states, nevertheless still they would not terminate alteration first and per se, but would result by new emanation. But if impotence consists in extrinsic impediment of the same potency, then alteration will be concerned with that extrinsic impediment not with potency itself; for extrinsic impediment pertains to some quality of the third species, through which due disposition itself of organ is so altered, that potency which depends on disposition of organ, cannot such indisposition standing, duly operate, and for this reason acute sight is rendered weak, and intellect is impeded from some intemperance of dispositions; and similarly imaginative or phantasy is rendered indisposed to subministering to intellect, which pertains to intellect, and to these dispositive qualities alteration can per se be given.

ARTICLE III.
Whether alteration is one motion, and continuous?

The unity of alteration can be considered, either in the nature of change, insofar as it destroys one terminus and produces another, or in the nature of motion, which includes both changes, namely how it is one motion or one or many changes. But continuity can be considered in three ways in alteration. In one way by reason of the subject in which it is, namely that quality is diffused through continuous parts of some subject. Second, by reason of time, namely that alteration is continued without any interruption of duration. Third, on the part of form, namely that form is not only introduced in an instant, and indivisibly whole, but something of it continuously in time, and something in an instant.

I SAY THEREFORE FIRST: Alteration in the nature of motion is one, but it includes two changes, one corruptive of the terminus a quo, another which is acquisitive of the terminus ad quem. That these two changes are given, is clear from what we said above treating of generation, and corruption, which import this double change, and in q. XIV of Physics, art. II, where we showed these changes to be necessary for motion, because in it transition happens from something to something and consequently by acquiring one and corrupting another. But that motion is one is clear, because it is one transition and way from subject to subject, that is, from positive terminus to positive terminus, between which latitude and distance or contrariety is found, but this is one when there are only two termini between which it is exercised, but thus it is found in alteration since it is transition from one contrary to another contrary, therefore one motion is given. And for the same reason it is one action, because there is one agent, and one patient, and consequently one procession of causality.

But you will say: Why similarly will substantial generation, and corruption, which are two changes not make one motion, as in qualities? It is responded that also changes, do not make motion, unless some positive distance or contrariety to be overcome is founded between positive termini themselves, and not only being or non-being to be changed. The reason for which is, that in change, as it is precise change, only acquisition of some being anew is intended, and consequently on the part of terminus a quo it seeks per se only non-being, or privation. But if this privation is conjoined to some positive form, that will be per accidens to such change, namely insofar as that privation is found conjoined to some form. But in motion not only is it intended to acquire being anew, but to overcome distance between termini between which it is concerned, and these ought to be positive, for between privative and positive latitude is not given, because without medium they are opposed as being and non-being, and if something is found of medium, it is by reason of some positive presupposed: but contraries have medium through which they positively distance, and are opposed. Whence since between substantial forms, some latitude of contrariety is not attended to, as is found in qualities because from participation of substantial forms, as from extremes something middle is not participated, nor tempered, nor in one and the same form is more or less found, therefore distance, and contrariety founding motion is not found between substantial forms, as between qualities.

Second, you will press against the conclusion: For it follows from it, intension and remission are not two motions although in the first article we said those to be two species of motion. The consequence is proved, for when there is motion from heat as one to heat as species, there is intension of heat, which is acquired and remission of coldness which is lost, for as much is lost of coldness as is acquired of heat, therefore that change of coldness is remission, and nevertheless it is one motion, since it is only one way, and one terminus acquired, and one lost, otherwise whenever quality is intended there would be two motions, one from lesser heat to greater, another remission of coldness from greater to lesser.

It is responded that intension and remission according to themselves are distinct motions just as accretion and decrease, ascent and descent, and then they are contrary when they are concerned with the same form, e.g. intending or remitting heat. But when they are concerned with diverse forms, e.g. intending heat, and remitting cold, either those motions will have themselves disparately, if the forms themselves do not have order and connection among themselves, or they will have themselves coordinately if the forms themselves have themselves consecutively, so that one remits or expels another. But when motion of intension corrupting coldness, or attenuating is found, it is not per se motion of remission, because it is not per se lessening, but consequently insofar as it is corruption of cold found in subject. Because however this is per accidens in respect to intension of heat, therefore that motion is not denominated remission, nor does it happen through mode of change corrupting something of cold consequently, and per accidens, when heat is intended; but motion does not take its species, nor is constituted in the nature of motion according to that which is per accidens and consequently, but according to that which is per se, and holds itself on the part of terminus ad quem, not on the part of terminus a quo only. And therefore when heat is intended although remission of cold is given, nevertheless it is not motion of remission, because that lessening of cold precisely holds itself on the part of terminus a quo, as changed and destroyed terminus, and having itself consequently to acquisition of heat, not as motion per se lessening, whose terminus ad quem is lessening of cold, and therefore it is not per se motion of remission, but change destructive of cold not per se lessening, and tempering of it. But sometimes intension can be given without remission of opposite, as in intension of light which already supposes darkness expelled, and in intension of charity, which supposes sin expelled through its first introduction, whence intension is not always conjoined to remission even through mode of change, and per accidens made.

On the continuity of alteration.

I SAY SECONDLY: Alteration which is truly motion, is continuous, as opposed to discrete if we attend to continuity, which happens through extension of quality in parts of the continuum, or which happens according to duration of time, or which happens through intension of form. And we say as opposed to discrete motion, because if we take continuous as saying the nature of perpetual and not ceasing, thus alteration is not continuous, but is finished, and interrupted very often. And so although quality can be produced in an instant, as when ultimate disposition happens, nevertheless when it happens through true motion, it neither happens in an instant, nor through many instantaneous actions, so that between instant and instant nothing of quality is produced, but only is disposed, that production happens in an instant, as some have thought. But the opposite is commonly held, as can be seen in Master Bannez, on the first book On Generation, q. VI on alteration, and the Carmelite Course, disp. II on alteration, q. X, Conimbricenses and others.

Therefore two things must be proved by us. First, that alteration cannot happen in an instant, but has succession in duration of time. Second, that in extension or intension of quality not only in instants, but also in intermediate time between instant and instant something of quality is produced, and alterative action does not cease.

The first has been proved by us, q. XXI Physics a. II, because successive motion does not have being in an instant, because by this itself that it is successive it is not indivisible, for all succession says part after part, therefore it says divisibility, therefore it does not coexist, nor is measured by instantaneous duration. Then, it is deduced from the doctrine of St. Thomas I p. q. LIII, a. III, as we also adduced there, because it cannot stand, that some subject rest the whole time under one form, and in the last instant of that time be under another form as if changed to it in having been made, therefore motion can never be perfected in one instant, so that before that instant there is nothing of motion and terminus of motion, or having been changed; because having been changed cannot be given unless some being moved precede, that is, some tendency to that form to be acquired and opposite to be expelled, but that it rest the whole time before, it is necessary that it so be under one form, that it not be in way of corruption to it, nor of tendency to another, but so have itself now as before; therefore it cannot stand, that in the last instant something be changed, and the whole time being moved not precede, but resting. Which also appears in instantaneous changes, if they happen in order and mode of nature, for some motion precedes, either through mode of disposition, or through mode of application, as is clear in substantial generation, and in illumination; for substantial generation happens dependently on preceding alteration, which is motion; and similarly luminous does not illuminate naturally in this space, where before it did not illuminate, except because it is produced anew here, or because it is brought here anew; if it is brought anew, local motion precedes, if it is produced anew through natural generation, as if fire happens, alteration precedes, and so in natural mode never is something posited under new form even in an instant, unless some motion precede. But if by Divine power something is produced, or created suddenly, without any disposition or preceding motion, this does not pertain to natural mode of operating, about which we speak at present, so also it is not surprising, that the body of Christ is posited under species of bread in some instant, when before there was no motion to it, because this happens by supernatural power not natural mode. And for this reason St. Thomas proves in the cited place that Angel cannot be moved in an instant resting the whole preceding time in another place. But if Angel exists in another place through whole and entire instant, without any time, or motion resting, it is necessary that it be one instant for existence in one place, and another for existence in another, so that it rest in one place not the whole time, but the whole instant, and in another instant be in another place; but then cessation of one place, which is in an instant, and through last being inception of another, which is in another instant, is not measured by one instant, but by two, and so that discrete motion is not in an instant, but in instants. Whence motion is never verified, even discrete, in one instant.

The second to be proved in this conclusion is, that if continuous motion is given continuity holds itself on the part of form in this sense, that if something of form is produced in an instant, something of it also is acquired in time, and action does not cease, and continuation of form between instant and instant; and so this part is denied by some. Nevertheless it is deduced from St. Thomas in II, dist. V, q. III, art. 1, where he proves that dispositions to substantial generation precede in time introduction of form, because alteration is continuous motion, and therefore its beginning and middle precede introduction of form therefore alteration is given in time, and is not discrete through instants. The holy doctor posits the same continuity of alteration through middle time between two instants in quod VI, art. IX, and can also be seen in first On Generation lect. XXIV, about text LXXXIV and V Physics lect. VII and is taken from the Philosopher in the same V Physics text XXXIX, where he says: "That every motion is continuous, and simply indeed it is necessary to be one, and continuous."

But the reason is, because either between two instants some motion is continued, so that action does not cease, nor rest, or between instant and instant all motion, and productive action of quality ceases. If the first, therefore that motion, and flux between instant and instant cannot be understood without some flowing form, which indeed in an instant has having been changed, or in having been made happens, but in time or motion is in becoming and being moved, because motion is not beyond things to which motion is, and so if really motion is given between instant and instant, really form is given, with which it is identified as with flowing terminus and successively passing from non-being to being. If the second is said, it is impossible, because if in this instant produced quality is given, and immediately after motion ceases, and in following instant something produced is given, that will not be acquired through motion, nor through alteration which is motion, but by another action distinct from succession and motion, which does not appear what it is. Then, because between instant and instant agent is duly applied to acting, and patient capable of receiving, and not impeded, not less, than in following instant because as we suppose, neither is patient changed between instant and instant from its disposition, nor agent from its activity, how therefore is it suspended from acting between instant and instant? Finally, in local motion something does not cease to be moved between instant and instant, because gradually from one place to another is passed through medium, and distance between two places is overcome, therefore similarly distance and contrariety of qualities and its intension ought to be overcome through succession and continuation of motion producing something between instant and instant.

Nor can it be said, that between instant and instant agent produces something, but not form, e.g. heat, but some disposition to heat, e.g. rarity or something similar. But against, for besides that to heat disposition is not given, since it itself is first quality, even this given the same argument is made concerning that disposition, for either it is quality, or not: if it is not quality it is not assignable what it is and to what predicament it pertains, or if it is mode of the same quality, what mode is it besides intension, and remission, for these if they are produced in time already motion of intension will be continuous. But if that disposition is quality, for example, rarity, therefore already some quality is produced between instant and instant and consequently the same reason will be concerning heat itself.

You will say: Although in intension of quality motion is continuous and something is produced between instant and instant, nevertheless when alteration is from one quality to another, e.g. between white and black, what of quality is produced between instant and instant? Since middle quality is not produced divisibly, but indivisibly, for it is true species of quality having indivisible being, and terminating having been changed. It is responded that when transition is made from white to black through middle quality, e.g. through pale, then between instant and instant pale happens imperfectly, insofar as whiteness begins to fade and fail from its perfection, and is whiteness in being corrupted, which is pale in becoming, and this happens between instant and instant, because that corruption of whiteness, and acquisition of paleness has latitude, and so according to something of latitude it happens in time, and in having been made is consummated in some instant.

On the indivisibles of alteration.

Since the continuum consists of connected parts, which indeed are continued by some indivisibles, it is necessary to explain how these indivisibles are given in qualities and successive alteration. It is responded that according to diverse modes of indivisibility in quality its indivisibles ought to be considered. For divisibility of extension is found by reason of quantified subject, and divisibility of motion by reason of succession, and finally divisibility of form according to more and less in intension and remission. As to the first, just as accidents have quantitative extension through quantity, which affects substance, and extends it and accidents which are in it, so through quantity quality is rendered extensive, and divisible, and consequently through it will also have indivisibles continuing such quantitative divisibility. And just as substance does not have divisibility, nor indivisibles, except through quantity, as has been proved in IX Physics q. XX, and in q. XIX of Logic, so neither quality, and other materially extended accidents have indivisibles of this extension except through quantity, for it is the same reason concerning them and concerning substance as to this.

As to the second we say, that in alteration insofar as it is motion indivisibles are given just as in other motions, namely that indivisibles are the very having been changed in succession of quality which terminate or continue succession itself of motion, as we explained, question twenty of Physics article one, but this having been changed, as is taken from St. Thomas I part. q. LIII, art. I, is explained through this, that mobile is not in the same disposition in any instant of that time in which it is moved. And so insofar as that disposition is in becoming, it is said to be in being moved, insofar as terminatively it is in having been made, it is said changed, and then it is another disposition, and so whether this having been changed consists in some indivisible in which it is finished and terminated, or in some other mode, or reason, nevertheless that formally constitutes having been changed, which constitutes mobile in other and other disposition terminatively, and in having been made, so that all parts, which are in becoming through time, are in instant in having been made, and from that having been made follows another becoming of another part which in having been made is in another instant, up to the last in which it stops. Quality therefore thus putting on diverse having been changed, constitutes diverse successive indivisibles of motion of alteration.

As to the third, namely, concerning indivisibles of quality itself or form which is acquired through alteration, there can be difficulty either within the same quality when it is intended or remitted, whether that latitude of intension, or remission which is divisible, ought to continue and couple its parts by some indivisibles. And concerning this pertains to the following question, where we will treat of intension, and remission of qualities. There can also be difficulty, whether in latitude itself or distance, which is found between two contrary qualities through which transition happens from one to another (as between white and black pale, green, blue, etc. are posited) whether also indivisibles are to be posited, by which that latitude and distance, which is divisible are joined together. But nevertheless in this no reason appears for constituting indivisibles, because these species are not continuous among themselves, nor do they have parts of the same nature which need to be coupled by diverse indivisibles, for they are diverse colors, or other middle qualities; between species of color, latitude is given from imperfect and inchoate color, to another perfect middle color, and from that to another up to extreme, with corruption of prior, which is expelled, and then some indivisible copulative of parts is not acquired, but certain determinate, and certain species, which nevertheless because it is middle and imperfect, prepares way and transition to another, which arises from temperature, and middleness of another, and therefore makes latitude to be overcome by motion, not to be coupled by indivisibles.

Arguments are solved.

First you will object against continuity of alteration: Motion of alteration in intension, cannot be continuous, therefore the conclusion is false, which speaks of all alteration. The antecedent is proved, for that which is produced through such motion is some mode of greater and lesser rootedness in subject, but such modes are indivisible in themselves, as will be proved in the following question, therefore they cannot terminate motion, because for terminating it some divisibility is required, and latitude in terminus, so that to part of motion part of terminus corresponds and to indivisible of motion indivisible of terminus. It is confirmed, because any part of motion truly, and properly produces something, therefore it is necessary that in terminus itself of motion something correspond to any part of motion, and so have prior, and posterior parts, therefore if any grade is something indivisible, at least formally it will be wholly produced through first part of motion, and if nothing will be left to another part, or half which it produces.

It is responded that it does not repugn that parts be terminated to something indivisible, insofar as it is terminus of parts, just as parts of line are terminated by indivisible, and similarly in motion all parts of motion are terminated by having been changed itself because all parts of motion have themselves in becoming in respect to it;

indeed every terminus ought to be indivisible, and terminate divisible parts, not that it inhere in each singly, and adequately, but inadequately to some undesignated, as we said in q. XX Physics a. III, and so although it is not adequated to them informatively, nevertheless it is adequated terminatively, because it is terminus of all of them. So therefore in quality when it is intended, some grade, or terminus is acquired through motion, which although in itself is indivisible, as terminus, nevertheless virtually says divisibility according as it presupposes parts, and is terminus of them; and so divisibility is not required in terminus according to itself and formally, but by reason of parts, which it terminates and which it is necessary to acquire successively through motion.

To the confirmation it is responded, that any part of motion produces something, namely that having been changed, nevertheless not any part of motion produces it adequately, for although that terminus is indivisible in itself, nevertheless it is terminative of many, which can stand under it, and regard it as their having been made: because if it had prior and posterior parts, it would not be their terminus, but companion. Nor does first part of motion produce whole indivisible, or having been changed, both because there first part of motion is not given, where all are undesignated, and confused; and because that half produces terminus inadequately, that is, as partially becoming of it, not its integral becoming.

Second it is argued: Because in alteration, and intension there is not only one terminus, but many which are acquired by continuous action itself, therefore it cannot be one motion because there is not one terminus from which unity is taken. The antecedent is clear, because while motion of alteration is continued many termini are produced, e.g. many grades in intension, or many middle qualities in alteration from one species to another, therefore terminus is not one, and consequently neither motion, thus neither will it be continuous. It is confirmed, because if alteration were continuous motion, and lasted, e.g. for an hour at end of hour infinite quality would be produced, because there are infinite instants, and consequently infinite having been changed, therefore if it is intension through that whole hour, those infinites are attained, of which each augments intension, and grade, and consequently at end of hour quality will be rendered infinite.

It is responded that in continuous alteration one adequate terminus is given, although many inadequate, but adequate terminus has unity by reason of last, in which motion stops, and to which others are ordered, just as in local motion, when many places are attained up to last, from that last unity of such continued motion is taken, and therefore simply it is one, because simply it is terminated in one, as we said more broadly q. XIX Physics. And so in any instant diverse inadequate place can be acquired, but between instant and instant transition happens from place to place, and then it is said to be in place as if in being changed, not having been changed, about which we spoke more broadly there. To the confirmation it is responded first that argument proceeds, even if alteration is discrete motion, just as within one hour there are infinite divisible parts so there are infinite indivisible instants in the same way, as infinite parts, and therefore although between instant there is not motion, nor action, the same difficulty remains how in infinite instants, which are included within hour that intension of quality happens, and are not infinite. It is responded therefore, that that infinity of instants, and of infinite parts, which are included in any continuum, is infinity in potency, and not act, because it is infinity, which is included, and consumed in aliquot, and finite parts, and therefore is something finite in act, and only infinite in potency, as we showed more broadly in q. XV and XX Physics. And so that it be infinite in act it is necessary, that it consist of infinite aliquot parts, because they ought to be equal to one third, and not communicating among themselves; but those infinite parts are proportional, and undesignated, and communicating among themselves, as we explained in cited places, and in the same way instants, or indivisibles have themselves, which with parts themselves and according to their mode are multiplied in continuum, whence only from them infinity in potency results, that is, because from any part divisibility of whole can be designated to infinity, and so from that, that whole hour intension lasts, it only follows, that quality will have infinite parts in potency, and similarly indivisibles, but finite in act, as included within finite termini of one hour.

Third it is argued: Because if alteration is continuous motion it will not be able to begin through first being, but through last non-being, like other motions, but this is impossible, therefore. The minor is proved, because if it begins through last non-being, it is true to say now agent does not alter, immediately after it will alter, in that now, therefore, either agent is duly applied to patient, and then there is no reason, why it would not act that application being posited, or it is not duly applied, and then neither immediately after will it act, because immediately after whole application cannot be completed, because it is divisible, since it happens through motion and in divisible part, and so immediately after it will not be totally applied in having been made, therefore neither will action follow. Similarly also it is inconvenient that quality which is permanent thing does not begin through first being, especially since it is determinate disposition, and in it minimum ought to be assigned, and consequently something certain and determinate, and therefore ought to begin through first being. Finally it is confirmed, because this seems to be mind of Aristotle VIII Physics text XXIII, where he says: "That to say continuum is altered, is to be adverse to perspicuous things," and he adds: "That alteration does not happen through parts like congelation, but suddenly like excavation of stone by last drop;" which clearly is not continuous motion. And St. Thomas affirms the same on the same place lecture V and VI Physics lection V and I against Gentiles ch. XLIX, and in other places.

It is responded that without doubt alteration like other motions, and quality produced through it begins through last non-being. And to the proof it is said, that whether application of agent to motion happens in instant or not, nevertheless having been applied in fact, pertains to having been changed, and is in instant, in that nevertheless it does not begin intrinsically, and so it does not well follow agent is applied in fact in this instant, therefore in this instant intrinsically is action or motion, for it does not follow, that action is in this instant intrinsically, unless action itself is instantaneous, but it suffices that it begin extrinsically, because immediately after it will be. Therefore it is not necessary that motion follow having been applied itself, except according to its nature, so that if something is applied in instant, motion will not be given in instant intrinsically, but immediately after, and so in that instant it will begin extrinsically just as heavy thing when it is generated above in the same instant begins to be moved not intrinsically, but extrinsically. In fact however first having been applied is not given, just as neither first having been changed in motion, for application happens through motion. But that quality is said to be permanent thing, and so ought to begin through first being, I distinguish; it is permanent thing when it is in having been made determinately, I concede; when it is in flux and becoming, I deny: or second it is permanent thing beginning in permanent mode, I deny; beginning in flowing, and successive mode, according to mode of motion, let it pass, and now it is accommodated to mode itself of becoming which is through motion, not to proper mode of being which quality has in having been made nevertheless which is disposition to substantial form under that state of disposition, ought to say something determinate, especially speaking of ultimate disposition, for others can have latitude, and indivisibility, and so that will begin in instant, and not through mode of motion.

To the confirmation it is responded that Aristotle and St. Thomas in cited places only intend against some ancient Philosophers, who posited all things always to be moved, and never to rest, that alteration is not continuous motion, that is, not to last perpetually, not nevertheless that as long as it lasts it is discrete; but when he says that alteration does not happen through parts, but suddenly, it is understood of alteration for ultimate effect, and disposition, not absolutely, and according to itself.

QUESTION IV.
ON INTENSION AND REMISSION.

ARTICLE I.
What is intension and remission, and in which forms is it found?

Generally speaking, every increase or decrease is called quantity, in whatever thing it occurs, because what is more sensible and manifest to us in the increases of things is quantity. But this notion of quantity can be found in qualities or forms in three ways. In one way through extension in the subject, and this only befits qualities which inhere in a subject having quantitative parts, as when whiteness is diffused through some subject, and grows in it, because it is in more subjects, and in this way quality is called great, or quantified accidentally by the quantity of the subject. In another way quantity, or magnitude is attributed to quality on the part of the object, about which it is concerned, as befits habits of intellect or will, which are concerned with some objects, and sometimes comprehend more, sometimes fewer, and according to this they are said to be extended, or increased in order to objects: and this is called virtual extension, or quantity of power, because great power is spoken of in order to the object, or weight which it can bear. In a third way quantity, or magnitude of quality is spoken of according to participation of greater perfection according to more and less, and this pertains to intension and remission, about which St. Thomas can be seen, q. 1 De Veritate, art. XI ad 10.

Concerning this intension therefore we suppose two things in the present article, and we dispute one which is more difficult. First we suppose, that such increase of intension, and decrease of remission is given, which pertains to the question whether it is. But this is clear from experience itself; for we see qualities grow, or decrease according to more or less, which cannot be reduced to the other two extensions, or magnitudes mentioned, for we see heat, or whiteness, or light sometimes to be more perfect and greater, not because it occupies more parts of the subject, but in the same, nor because the subject is denser or rarer, since in the same air the light of the sun is more perfect than of the moon, the same rarity of air standing, and so this increase does not pertain to quantity of formal extension; similarly neither does it pertain to virtual extension, because light and heat and similar qualities do not have diverse objects about which they are concerned, but subjects which they inform. It remains therefore, that it is quantity, and increase of intension according to more and less.

Second, we suppose the definition of intension which pertains to the question what it is. But intension can be defined, that it is motion from more imperfect being or state of the same quality to more perfect the same sensible subject remaining. But remission conversely from more perfect to more imperfect. Thus Master Bannez teaches q. II on alteration, and it is said from more imperfect being or state, that the definition may abstract from every opinion, whether intension happens according to diverse grades, or diverse modes, or diverse participation in being, about which we will speak later. But it is called motion, which is genus to alteration, and consequently to intension, but because not every intension happens through alteration properly so-called, as in spiritual qualities, therefore we use the general name of motion, and through this is also excluded acquisition of new state in some quality, or form not through motion, but through some elevation, or diverse mode of operating, as charity, which is in the way changes state in the fatherland, not through greater intension and motion, but through new apprehension of object clearly seen. Finally, distinction of intension from simple alteration is signified through this, that it is of the same quality to more perfect state or being, because simple alteration produces quality itself first and per se, and not only more perfect state, or being of it.

But we inquire, which forms are capable of this increase, and magnitude according to more and less, which is intension and remission? And this difficulty is to be resolved through some conclusions.

I SAY FIRST: Substance is incapable of increase of intension, and similarly quantity and relation. The opinion is expressed by the Philosopher and all his interpreters commonly follow, for in the chapter on substance, it is posited among its properties not to receive more and less: and he teaches the same about quantity in the chapter on quantity: and about relation he also teaches that it does not receive more and less, except by reason of its foundation, as similarity is more intense, when agreement of extremes is greater, although forms themselves or things are less intense in themselves, and so intension of relation follows intension of proximate foundation not remote.

The foundation of this conclusion, in common can be taken, because to these three predicaments first and per se motion strictly so-called is not given, namely which happens according to positive latitude, but intension is motion. But if some motion is given, it is according to extension, as in augmentation of quantity, for it is clear that substance happens through change, and not through motion, since it does not happen from the same sensible subject but from prime matter. Similarly quantity, when it is first produced, follows generation itself without other motion; but when afterwards it is extended it admits motion of augmentation, but not of alteration, and intension; whence one part of quantity added to another, does not make more perfect grade, but extension of the same perfection, for it makes greater, not better. And this especially, because species of quantity are essentially varied according to diverse termination, as is clear in numbers, and figures, in two-cubit, and three-cubit, etc. therefore of their nature is indivisibility, or termination, therefore they do not admit latitude in the same species. To relation finally motion is not given per se, as is said in Physics V, and there we proved q. XIX, for relation only results foundation being posited, motion is not given to it, so it does not have intension per se first, but if it has it is consequent from foundation.

Second, in particular foundation is taken from St. Thomas in I-II, q. LII, art. 1, because namely form from which is taken species of thing which it actuates, cannot but consist in the indivisible, and consequently not receive more nor less, for if that which constitutes species had latitude either that whole latitude would be required to constitute species, or without the whole species could be constituted, even if something of it were lacking. If the first divisibility is not saved in such form, since species is not constituted through its latitude itself, but totality and consummation of it, which indeed says indivisibility, for the last is always indivisible. If the second, therefore without some part of that latitude species is saved, and so that, without which it is saved does not pertain to constitution of species, nor is it quidditative predicate, since without it quiddity is saved.

From which is deduced, that substantial form does not receive more and less, because per se intrinsically it is ordered to constituting substantial species of thing, of which it is form. And although quality and other accidents also have their species, and essence, nevertheless those forms are not ordered to constituting species of their subject, which they inform, but suppose it constituted, and so per se first they do not constitute species of that in which they are. But substantial form constitutes per se first species of that in which it is and because of this substantial form has repugnance with intension, or reception of more and less, but accidental form does not have this on this part, although that intension actually befit it, many other conditions are required: but it suffices for now that substantial form in that, in which it is found gives essential species and per se; but accidental form does not, but supposes species constituted. Whence St. Thomas signally in the cited place did not say therefore substantial form does not receive more and less, because it has species, or gives it in any way, but because participant of such form, has species according to it. Therefore it must be looked to the office which form exercises in its participant, or in its subject, in which it is received; for if subject so regards some form, that through it it has its species, and its constitutive, such form in such participant does not receive more and less. But other forms, which so come to subject, that through them participant does not have species, but rather come to species constituted, on this part it does not repugn, that they have some latitude in such subject, notwithstanding that they have some species, but not constituting subject itself in which they are participated, and therefore from such participation in subject it does not repugn to have latitude according to more and less.

But if you say: For every species consists in some indivisible, for species are like numbers, which by any addition, or subtraction are varied. It is responded that it is one thing that species as to its constitution consists in the indivisible, another that through it subject itself participating such form is constituted, or that indivisibility itself is some predicate from constitutives of such species, for this is not found in every species, and therefore not all repugn divisibility, and latitude, which they have in participation of subject, although every species is said to consist in the indivisible because of integrity, which it requires, of all essential predicates to its constitution, nevertheless not every species excludes divisibility on the part of participation of subject whence latitude of intension is taken, as we will say immediately.

I SAY SECONDLY: Intension is found in quality alone, not however in every species of quality. And indeed speaking of physical intension, which is species of alteration, there is no doubt, that just as alteration is not given except in the predicament of quality so neither intension its species. But nevertheless lest someone say that intension can be found in spirituals, and not only in alteration, therefore more generally the conclusion must be proved. And first that in this predicament intension is found at least as to some of its species, can in no way be doubted, since it rests on manifest experience, as we see heat sometimes to be more intended sometimes remitted, and the same is true of other primary qualities and of middle qualities, as color, rarity, and density and similar ones.

But discoursing through species of this predicament, which are capable of intension not only alterative (for this is reduced to the third species alone just as alteration itself) but also commonly so-called, it is clear first, that habit and disposition is capable of intension, because habits of virtues are sometimes more fervent sometimes more remiss, and similarly science is sometimes more profound and efficacious, sometimes more obtuse, not only according to extension to diverse conclusions, but concerning the same truth greater clarity can be given, and resolution to its principles, which pertains to greater intension, and so someone is denominated more knowing, or more virtuous, and this also extends to supernatural habits, as is said of charity to Philippians 1: "I pray that your charity may abound more and more": Apocalypse last: "He that is just, let him be justified still", and finally the Council of Trent defines that the sanctified grow in justice received sess. VI, ch. X.

As pertains to the second species, some think, that it does not receive more and less, as intellect and will, visual power, etc. because they are proper passions, and immediately follow essence of thing through emanation, but not through motion, and according to contrariety of latitude befit subject. Master Bannez holds the opposite, I On Generation ch. IV, question I, last conclusion, and he posits example in visual power, which it is clear receives more and less, and now is of more acute sight, now more dull. Certainly eagle sees more intensely, than man, and among men, some better and more strongly others, and incomparably eyes of the same man will see more acutely after resurrection, than now. Nor does it obstruct, that they are proper passions of soul, because also heat, and dryness and other primary qualities are properties of elements, and nevertheless they receive more and less. Cajetan I-II, question LII, article 1, at end goes middle way, and says that natural powers, which follow substances immutably are not intended, just as neither substances themselves; but those which do not follow immutably, but dependently on some alteration, as hard and soft, and other similar ones it is not inconvenient, that they receive more and less. And because powers affixed to corporeal organs depend on alterative qualities, by which organs are tempered, therefore it seems, that they can receive more and less, as visual power can be more acute, and similarly hearing, etc. And this opinion seems sufficiently reasonable, for there is no reason, why powers of this kind, which depend on primary qualities, or alteration, do not receive more and less, especially since experience supports, which senses intension and remission in them, as is clear in visual power, and soft and hard, and others. Nor does it obstruct, that they happen through instantaneous generation, because also some which happen instantaneously, can be intended as light and spiritual acts of intellect and will. But that some powers are not intended, therefore is, as Cajetan says, because they follow immutably to some nature, that is, independently of alterative qualities, and especially which befit something according to ultimate constitutive grade of nature, as intellect and will to rational grade, do not receive more and less, because grade itself says some ultimation. And so this is not to be regulated through this, that some quality is proper passion or not, but through this that some indivisibility is of the nature of some form or is not, as we insinuated above. And so because certain powers are immediately consequent to substance, and independent from some alteration, therefore some do not receive latitude, according to more and less, but others which do not so immediately follow, nor are independent from some alteration and primary qualities receive more and less by reason of them.

As pertains to the third species of quality, it is not to be doubted that in it intension can be found and that physically alterative, since in the third species of quality, as we proved, in the preceding question physical alteration properly is found, and consequently intension can be found, which is its species, and this also is clear to sense in heat, and cold and other sensible qualities, which pertain to this species.

Finally, in the fourth species of quality motion of intension is not found, because of the nature of figure, which pertains to such species, is termination of quantity, from which it results, and this is varied in species, any variety of termination being made, but termination happens according to something indivisible, and so does not allow latitude of intension.

I SAY LASTLY: Besides intension which is motion according to more and less and besides extension through quantitative parts of body, there is also given extensive increase in some quantities not according to parts of subject, in which it inheres, but according to objects which are attained, because they are inadequate objects, and according as some habit attains diverse objects, it is said to be increased more extensively. Thus it is taken from St. Thomas, I-II, q. LII, art. I ad 2 and II-II, q. XXIV, art. V, where he teaches that certain habits are increased through extension in respect to objects, as science which is gradually learned, is increased anew, concerning diverse conclusions, which before it did not attain, and this increase is not intension; because it is not concerned with the same truth but with diverse ones but intension of science happens through this that it comprehends the same truth more clearly and profoundly. Concerning this extensive increase note three positions of St. Thomas. First, that such increase does not happen in all forms or qualities, but in those which are specified by something extrinsic, or say order to another. Thus he teaches I-II, question LII, art. 1, at end of body. Second is, that neither in all habits saying order to specifying object, is this increase found; for charity says order to object, nor nevertheless does it admit addition through extensive increase, as St. Thomas teaches II-II, q. XXIV cited, because any least charity fulfills the whole law, and resists all temptations, and so any attains all objects, namely God and neighbor, therefore it does not become greater through extension to objects. But science needs this extension, because through distinct means it proceeds to proving distinct conclusions, although all are coordinated among themselves, and under the same light and therefore pertain to the same habit, but they seek diverse explication of object and distinct species, or ordination of them, and distinct probative means, about which we spoke more broadly in Logic q. XXVII, art. III.

But if you say: For also moral virtues even if they are infused can have new difficulty concerning diverse partial objects, as we said in the cited place of Logic, indeed thence we took argument to prove, that science is simple habit, although it overcomes distinct inadequate difficulties, therefore falsely and inconsequently we say at present, that moral virtues do not receive addition, but only science.

It is responded that as we said in the cited place of Logic in solution to confirmation of first argument, infused virtues as charity and faith can have diverse difficulty concerning diverse matters, not on the part of virtue itself, but on the part of one operating, which is accidental difficulty, and nevertheless one simple quality suffices for overcoming those, similarly therefore it will suffice in sciences for overcoming distinct difficulties concerning distinct conclusions, although it requires for those diverse inadequate motives, because they are united under the same formal reason and light, for those motives are coordinated among themselves, insofar as one is deduced from another. And so efficacious argument is drawn from similar to prove, that one quality will suffice for attaining diverse conclusions, although each has its own proof and distinct motive, and diverse difficulty on the part of means itself, and not only on the part of one operating, because still there remains place for unity of habit, because principal reason is saved, whence its unity is taken, namely the same scientific formal reason, under which all those motives, and proofs are coordinated, and contained. Whence if it does not repugn, that one quality attain distinct matters, and overcome distinct difficulties on the part of one operating, provided the same formal reason is preserved, as is clear in virtues, also it will not repugn unity of formal reason standing, that the same quality attain diverse conclusions and overcome distinct difficulties requiring distinct means under the same one formal reason and light ordered.

Third proposition is, that this extensive increase is said by St. Thomas to happen through addition, by which habit is increased according to itself, but intension through rootedness in subject, and not through addition, not because new quality is added in extensive increase; for St. Thomas denies that I-II, q. LIV, art. IV, but because new objective increase is added, and because order to object is said to befit habit according to itself, but participation and rootedness of intension happens through order to subject in the opinion of St. Thomas, therefore to distinguish one increase from another that increase is said to happen through addition, but this not, because there new object is added, and new explication of habit to it, but here new subject is not added, but in the same intension happens, nor also new entity of quality, and so from no part does addition happen.

Arguments are solved.

It is argued first: Because it does not stand that intension increases quality according to more and less, unless species itself and essence of quality is varied, therefore the explained reason of intension is null. The antecedent is proved, because that in which quality becomes more and less, is proper reason itself and species of quality, but species are like numbers, that by any addition, or subtraction they are varied. If it is said that intension happens through more and less not in essential, and specific reason itself, which consists in the indivisible, but in something extrinsic, as in addition of grade or new entity, or in greater participation, or rootedness from subject, against is, because first intension cannot happen through addition of new quality of the same species, as we will say in the following article: but diverse participation in subject and rootedness, cannot happen according to something accidental, but according to essence itself of quality, and St. Thomas says the opposite is ignorance of proper voice II-II, question XXIV, art. IV ad 3, and question 2 On Virtues art. XI, therefore in essence itself variation happens through intension. Then, because if intension does not happen according to variation in essential reason itself or species of quality, but in something extrinsic, or pertaining to individuation, it follows that substantial forms can be intended, because indivisible species which form gives can be saved with increase according to more and less in something extrinsic individual, as because in more perfect mode they are united to subject or are root of more perfect mode of operating, why therefore will there not be increase of intension in them? And the same argument can be made concerning quantity, because according to diverse mode of terminating subject it can be participated more perfectly and imperfectly in subject in some extrinsic mode, and not pertaining to intrinsic species, why therefore will it not receive more and less?

It is responded by denying the antecedent. And to the proof it is said that through intension species is not varied, but mode of species in actuating subject, and more perfectly reducing from potency to act, as will be said in the following article. But that some addition, or subtraction vary species of some form it ought to add or subtract some quidditative predicate, or intrinsic mode of such predicates, and essentially required, but not add or take away only some mode of diverse participation in subject, or addition of new entity as if integral, as we see in material substance more or fewer integral parts to be added, or subtracted, without variation of species.

To the first reply it is said, that intension does not happen through addition of new entity, but through greater rootedness in subject, as we will say in the following article. But St. Thomas says those ignore proper voice, who say form is increased through rootedness in subject, and not according to essence, because they understood rootedness itself not to pertain to entity of accident, although nevertheless entity of accident from itself postulates to inhere, and be participated in subject, and so to be more rooted without doubt involves entity itself, and so St. Thomas says in II-II cited place, that it is nothing other than it to be increased according to essence, than it to be more in being of subject, which is it to be more rooted. About which more in art. III.

To the second reply it is responded that it obstructs substantial form lest it be intended, because it does not have latitude and contrariety through which it is capable of motion, and consequently of intension, as has already been said above. And although indivisible species of form can stand with divisible increase according to more and less, nevertheless this does not have place in substantial form, because not only in itself does it have species, but it constitutes its composite, which it informs in species, whence neither on the part of its species, nor on the part of its participation, and participating subject, does it found latitude, but if in some way it is varied, whole species is varied in itself and in participation of subject. It is otherwise in accident, through whose participation subject itself is not constituted in its essential species, but is supposed constituted, whence on this part accidental form is not impeded to be intended and remitted. Nor nevertheless from this does it follow, that all accidental forms can be intended, or remitted, if they do not have other conditions, as contrariety or latitude, so that indivisibility in constitution of them is not intrinsic, and of their nature as in constituting species of quantity we noted above, and in other species of quality lacking latitude, and including indivisibility.

But if you say: Aristotle in VIII Metaphysics text X, and St. Thomas there lect. I, say, that matter perhaps receives more and less, St. Thomas responds I-II, q. LII, art. 1, that is understood concerning matter according to material dispositions not according to its substance, according to which it composes with form indivisible species of nature.

You will object second: Quality according to itself and antecedently to respect to subject has contrariety, for example, with cold, because it has contrariety with it, which it does not beg from subject, but where there is contrariety there is maximum distance, therefore also there is latitude according to more and less, and consequently intension, and remission; indeed that contrariety of forms is only according to grades, because in remiss grades qualities are not contrary, but in intense, in which alone they are not compatible, therefore not through order to subject are they said to have more and less, but according to themselves. Also if God separated whiteness of snow and whiteness of man, that would be more perfect than this, and not through rootedness in subject, because they are outside it, therefore according to themselves; and so it will not repugn substance to have intension. Finally, because the same is whiteness in concrete and in abstract: therefore if in abstract it is not intended neither in concrete, or conversely if in concrete it is intended also in abstract. But if accident in concrete, as white is taken not for form existing in subject, but for composite from body and whiteness, this is not intended, because something which it includes, namely body is not intended.

It is responded that although some qualities according to themselves found contrariety as between form and form, and not only according to participation of subject (although contrariety cannot be exercised, except in subject, because contraries in the same subject mutually expel themselves) nevertheless latitude and distance according to more and less in intension of forms is not taken according to some contrariety between form and form, but according to latitude of participation, and rootedness of form in the same subject. And when it is said, that where there is maximum distance there is also latitude according to more and less, it is responded that it is according to more and less in diverse forms, which are not extreme, but middle between contrary extremes; but more and less in the same form does not found contrariety, and distance except in respect to subject, in which it is rooted, and participated; and so contrariety between form and form, whether according to maximum distance, or according to middle forms befits forms according to themselves, but distance according to more and less in the same form, does not befit it except according to diverse participation in subject. Contrariety therefore between form and form comes from nature itself of such forms, although it requires perfect state, that contrariety be exercised, which does not happen except in perfect grades, because imperfect motions are compatible in the same subject, as we will say more broadly below q. X. But to that which is said concerning whiteness of man, and of snow separated, it is responded, that one of them will be more intense than the other, not because of greater actual rootedness in subject, which they lack, but because of aptitudinal which it retains to order which they say to subject. But when St. Thomas says separated whiteness has every possible perfection and cannot be intended, he speaks of whiteness if it were subsistent, and neither actually, nor aptitudinally regarded subject. Finally, to that which is said concerning whiteness in abstract and in concrete we say, that it is the same form, but not in the same state, nor with the same respect, because in concrete it regards subject, in abstract it relinquishes; whence St. Thomas says I-II, question LIII, art. I ad 3, that intension and remission is attributed to accidents in concrete, and so it is not said more whiteness, but more white: but white for composite is not intended by reason of whole, but by reason of part, namely by reason of form, as communicable to subject.

ARTICLE II.

Whether intensification occurs through the addition of degree to degree, or through greater rootedness in the subject?

Almost all agree that for the intensification of a quality, either some greater rootedness in the subject is required, or it follows, insofar as an intense quality is firmer and more tenacious in the subject, and this is rootedness. However, the difficulty is whether for this firmness, which is also an increase of the quality, the addition of a new entity or form is required, in the way that increase occurs in quantity by adding new quantity, or whether this greater rootedness occurs without the addition of a new entity through the addition of a new mode, and there is also difficulty concerning the mode itself, whether it is a new mode adding a new informative power, or formal reason of informing to the form itself, or whether only a new mode is added, which is a new explanation or application of the same form without the addition of a new formal reason. And we commonly use the term "degree" in every opinion, because "degree" signifies not only a different superadded entity, but also a different mode, and thus we generally designate the perfection of intensification by the name of degree, whether it occurs through the addition of entity and form, or through the addition of mode, because a different mode also graduates. Hence Cajetan, who banished addition from intensification in I-II, q. 52, art. 1, nevertheless did not shrink from the expression of degrees, as is clear there in § "For clarity".

In this matter, therefore, the principal opinions are reduced to two. The first, that intensification occurs according to the addition of one quality to another, which addition, since it does not corrupt the preceding but unites with it and composes with it, behaves as a partial quality, and thus this opinion imagines the intensification of quality in the manner of the increase of quantity. The second opinion teaches that intensification occurs without the addition of a new quality or form, but through its greater communication in the subject, which induces a new termination or mode in the quality. Scotus follows the first opinion in I, distinction 17, question 3, and among more recent authors, Fonseca, Suarez, Vazquez, Rubius, Granados, and others whom the Carmelites cite here in disputation 4, question 8. St. Thomas follows the second in I, dist. 17, q. 2, art. 2, and question 1 De Virtutibus art. 11, and I-II, q. 52, art. 2, and I-II, q. 24, art. 5, and all Thomists commonly follow it.

However, in explaining each opinion, several other opinions are divided. For concerning the first opinion, some think that those partial entities or degrees which constitute the intense form are of the same nature and equality, and that the second or third degree does not have more than the first, but is rendered second because it presupposes the first, to which it is superadded, and so on for the rest. But others think that those degrees are of different natures, and that the second degree is not of the same perfection and equality as the first. Thus Father Suarez, disp. 46 Metaphysics p. sect. 1, from number 29. To these are added indivisibles, which unite those degrees as parts, and similarly in the degrees themselves there is latitude according to finite aliquot parts, and according to proportional parts to infinity. And in a word, all things are considered in the manner of increase in quantity. There are, however, those who admit a subordination of these degrees among themselves; so that the second presupposes the first, and the third the second, by a certain natural subordination and dependence, as from a material disposition, and thus they have individual inequality, concerning which Murcia can be consulted, disp. 2 on alteration q. 5. I omit that opinion older than Scotus which St. Thomas mentions in the cited place from the Sentences art. 1, and which Durandus later followed in I, dist. 17, q. 5 and 7 and others, that intensification produces a new total quality destroying the old one, for this opinion does not posit that the same quality is intensified and remitted, but that a different one is generated and corrupted.

In explaining the opinion of St. Thomas, no little labor is expended concerning what is understood by the name of rootedness, or greater communication, and it is commonly understood to be some new mode, but the Authors are greatly divided in explaining what mode it is, for some posit it to be a new mode which gives the quality a new power of informing the subject as if a formal reason of communicating itself. But others posit only a mode of new termination, or explanation of the form in the subject which pertains as it were to the union and application of it. Hence some have said it is a new union, or inherence of the quality; others a new existence; others a new reduction of the subject from potency to act, and that it is a distinct mode from inherence and union; others think this mode consists in that more of the contrary form is rejected, so that the form itself remains purer and less mixed. And here the same difficulty returns concerning the preceding opinions, namely whether these new modes have some subordination among themselves, and are not of the same nature and equality, or whether they are all equal, and are only called second or third because they presuppose the prior one.

I SAY THEREFORE FIRSTLY: Intensification does not occur through the addition of some new form or quality, whether one that corrupts the former and produces a new one, or one that, presupposing the former, produces another as partial and joined to it, which makes it greater. This conclusion is expressly that of St. Thomas in the places recently alleged, where he treats and resolves this question ex professo, and indeed that a form is not produced which corrupts the preceding one is commonly admitted by all, because that preceding quality cannot be destroyed by the supervening one, because it is not contrary to it, but of the same species, nor from a defect of the subject or conserving cause, because they remain, as we suppose and because otherwise as we said it would not be intensification, increase, and perfection of the same quality, but generation of a new one, just as quantity could not be said to increase if the preceding were corrupted and another produced anew.

But the second part, namely that in intensification a new part of form or quality is not made which is added to the pre-existing one, is manifestly that of St. Thomas and especially can be seen in the cited place from I-II only at 2 where he says: "That the cause increasing a habit indeed always makes something in the subject, not however a new form, but makes the subject participate more perfectly in the pre-existing form." And at 3 he says "That what is less hot or white is not in potency to the form, since it already has the form in act, but is in potency to the perfect mode of participation, and this is consequent upon the action of the agent." And in II-II, q. 23, art. 5: "For a form to be greater is for it to inhere more in the recipient, not however for another form to come, for this would be if the form had some quantity from itself, not in comparison to the subject." Therefore according to St. Thomas, greater rootedness in the subject is not founded on a new entity of form, but on a new mode of participation of the form. Hence Thomas not only denies that intensification occurs through addition, lest he seem to posit a distinction of form, because it pertains to intensification that the same form remain; but St. Thomas further explained that intensification does not occur through addition, because a new form is not acquired, but a new mode or participation of form, therefore he absolutely thinks that intensification does not occur through a new entity, but through mode.

Nor does it matter that some object that St. Thomas said that those who say quality is intensified according to greater rootedness in the subject, and not according to essence, are ignorant of their own voice. From which they infer that the holy doctor thought that intensification does not occur without addition of entity. However, the sense of St. Thomas is very clear, for he rebukes those who wanted quality to be intensified in the subject without it being intrinsically perfected in itself; but only because the subject would behave differently in participating in the form, the form itself remaining entirely unchanged, hence that which is repugnant, and is to be ignorant of one's own voice, for the form cannot be communicated to the subject through extrinsic denomination alone, but through intrinsic change, since the form is perfected from the very communication of the subject, since its essence is intrinsically ordered to this, that it inform the subject, hence in the cited place from II-II, art. 4 at 3, after St. Thomas said that those who say charity is not increased according to essence but according to rootedness or fervor are ignorant of their own voice, he adds: "Because for it to be increased according to essence is nothing other than for it to inhere more in the subject, which is to be more rooted in the subject," therefore to be increased according to essence is not for St. Thomas to be increased through addition, but is the same as to be more rooted and to inhere in the subject, which is not found in the form without intrinsic change of the entity itself, namely through a mode added to it.

Supposing therefore that this is the opinion of St. Thomas, it remains to give the foundation of this truth. But to give it St. Thomas supposes as most certain that if the increase of intensification occurs according to addition of form to form, it is impossible to understand this without some distinction and number of form to form, for the same cannot be added to itself, and the very separation of degrees when quality is remitted and loses them clearly shows some distinction of what is lost and what remains. Which being supposed, there are two things which in the opinion of St. Thomas render intensification through addition of quality to quality incompossible. First, because according to St. Thomas himself, two accidents distinct only in number and of the same species cannot be received in the same part and indivisible subject, as we will show below in question 9. But if intensification were to occur through addition of a new quality of the same species, necessarily the same subject would receive diverse accidents in number, because any of these qualities, if taken alone and without conjunction with another, is sufficient to make one individual of accident, as is clear when before addition the quality remained in the subject individuated without that new superadded part, therefore what is afterwards superadded also demands to be individuated by such a subject like the preceding, therefore already two accidents can be sufficiently individuated from the same part of the subject; but it is accidental that they are joined in one. And on this is founded what St. Thomas in I-II, quest. 52, art. 2 cites from the Philosopher in Physics 4 text 84, that intensification cannot occur through addition: "Because from hot something becomes more hot with nothing added in the hot subject," for St. Thomas opposes as the same that heat is added and that hot is added, because heat cannot be added unless a distinct subject is added by which it is individuated, and thus it is the same to add heat and to add hot. But this is to be treated below in said question nine, therefore in the present it is not necessary to expound it.

The second principle therefore in the doctrine of St. Thomas is that no form can have quantity and parts except in order to the subject and per accidens, not however per se, because otherwise it would be composed of several parts, and thus would not be pure form, but something constituted and composite, which is against the nature of form, which ought to be something simple and composing part, not however a composite thing. But if the advening form does not compose with the preceding, nor constitute one per se, the intense quality will only be one per accidens, that is, several remiss qualities crowded in the same subject, hence an intense quality would not be so one as a remiss quality, nor would the motion of intensification be about the same quality which would be more or less such, but about diverse qualities; and further an operative quality (like heat) when it was intense could not operate with a single operation, but would have to make several operations, because it would not proceed from a single quality, but from several, and thus making an act of intense quality, it would make several acts and not one, because it would proceed from several remiss forms, of which each would have its own operation, all of which are very absurd and inconvenient.

If therefore several parts compose one quality, they are either integral parts of it, or essential. They cannot be essential, both because without any of them the essence of quality is saved as is clear in remiss quality; and because if essential parts compose one per se, one must behave as matter, the other as form, or as potency and act, but those parts or degrees behave as forms, because they inform the subject, not however one behaves as matter, the other as form, or as potency and act, otherwise quality would inform quality as form to matter, nor would that which behaved as matter be active and operative per se, but only when it had its act by which it would inform, although we see that both the remiss part of heat, which seems to be matter, and the intense, which seems to be form, are operative and actual. But they cannot be integral parts, both because form cannot be composed of those parts, because it is of the nature of form that it be the principle of the composite, not however principled and composite, but simple principle; and also because composition from integral parts specially repugnant to form or quality, integral parts are material and belong to matter, as we will say below in question 9, because integral parts agree in form and differ in quantity, since without any of them the quiddity and substance of the thing is saved, and thus addition of an integral part does not make addition of form. But since form is that by which something is constituted as by a principle, addition of form by way of integral part does not add the nature of form, but rather materializes the form itself, and multiplies it according to something material not formal, and thus does not make the form more perfect and more such in the nature of form which pertains to intensification, but materially multiplied, which pertains to extension. Nor can it be said that they are integral parts by similitude, in the way that integral parts are assigned to virtues by St. Thomas and theologians in II-II, quest. 48 and q. 128 and q. 143. For these integral parts do not intend virtues, but import certain conditions, or dispositions or habits adjoined to the principal virtue, giving diverse operations, and these can also be found in remiss virtue, just as temperance has honesty and modesty; fortitude confidence and magnificence; prudence memory, docility even if they are remiss; but intense and remiss quality do not differ thus, but both have the same nature of activity or operation, although not the same mode of perfection, not however does one behave as a condition or disposition to the other.

Finally, the conclusion is proved, because the multiplication of entities, the less it is, the more fitting it is to nature, if therefore it is not impossible, nor inconvenient, that intensification occur without addition of form and new entity, such addition is not to be posited: but that this is not impossible, nor inconvenient will be proved more fully in the following conclusion, where we show that a more perfect union of some form can occur without addition of new entity, and this more explains the unity and simplicity of form, because the less addition is made the simpler it is in entity, although it is multiple in power, but it pertains to the nature of intensification that the same form remaining becomes more perfect and more powerful, therefore if this can occur through greater communication of itself to the subject, without addition of new entity, this will be more fitting to the nature of intensification.

I SAY SECONDLY: Intensification does not occur through the addition of some new mode giving the form a new informative power, or new formal reason of informing, but a new explanation of the same form in the subject by removing confusion and potentiality of it and reducing it to greater unity, and subjecting the subject more to such a form, from which it follows that if it has a contrary, it expels it, not however does intensification formally consist in this. This is taken from St. Thomas in I, dist. 17, quest. 2, art. 2 at 3, where he says: "That it is not of the nature of intensification of any quality that it be through removal from the contrary, but this happens to quality according as it is in a subject participating in the contrary, but this is of necessity for intensification, that quality be led from the imperfect to the perfect, as is clear in the diaphanous, in which there is nothing contrary to light, which can be intensified according to the increase of the dominating power. But this imperfection is from the potentiality of the nature itself, which is subjected to perfection and act, for since every receptive potency relates to many things according to this multiplicity it is dissimilar to the agent principle, which is terminated to one act and according as this conjunction of potentiality is more subjected to act, the act is more perfectly perfected, and the perfect itself becomes more one, and more assimilated to the agent principle." Thus St. Thomas, who also in III, quest. 24, art. 5, in the body, and at 3, explains this intensification to occur through this that the subject is more reduced to act, and through this that the form more inheres in the subject, and that for the form itself to become greater, is for it to more inhere in the recipient, not however for another form to come.

That the foundation of this conclusion may be given, and explained, two things must be done. First, to show that it does not repugn that the union and communication of form to subject have latitude, and can be varied without a new entity of form being added. Second, that this mode ought not add a new informative power, but a new mode of communication and union. The first is clear from some examples, for we see that the same quantity without addition of parts and new quantity can change termination and mode of existing in the subject, as we will say below in question seven, as occurs in rarefaction and condensation. Similarly the substantial form of the soul without addition of new entity can explain itself and unite to matter coming through nutrition in diverse mode, and give one effect in one part and another in another, as in the eye it gives power of seeing, in the hand of touching, and can be deprived of one effect and not another, and again give that effect which it lost, if the matter is duly disposed. Similarly therefore it will not repugn that the same quality actuate the subject in diverse mode by its communication, and explain its effects in matter in diverse mode according to the latitude which it has; a sign of which is the very contrariety of forms, which can be more perfectly or imperfectly removed. And so it does not repugn that the whole form be communicated to the subject, but not totally, and according to every mode, or effect, which it can give to it, and thus more or less assimilate the subject to itself, and reduce its potentiality to unity of actuality, just as also the whole God is seen by any blessed, but not totally, and therefore can be united in diverse mode, and communicate itself without addition of entity through greater explanation of the same. Similarly in grace we see that united to one subject it explains some effect, e.g. to make an adoptive son, which in another subject as in Christ because of the incapacity of the person it cannot make. And the visible species in air does not render the subject informed representatively and intentionally, but only entitatively, but in the eye it also informs intentionally without any addition of entity, and many other similar examples are at hand, which manifestly show that the same form without entitative addition can explain diverse formal effects, or the same in diverse mode, because of diverse disposition of the subject, which is diversely subjected to the form. Indeed I add that even if intensification occurred through addition of form to form, still it would be necessary that union be varied since when one part accrues to another part, and from both one form is made, that union which before united and only modified the preceding form cannot modify and affect that new form which is conflated from both, therefore it is necessary that a new union be given, just as also a new form is conflated, unless perhaps it is said that several partial unions of diverse parts of the same form remain, which however does not remove that one total is given, which is conflated from all, just as one form is given which is made from all those parts, but union corresponds to form, therefore just as the total formal is diverse, so it is necessary that such union be varied.

But the second is explained, because in defending the opinion of St. Thomas there are two ways of speaking. For some posit that through intensification a new mode is produced, which is held not only on the part of union, but also on the part of the form itself, or informative principle, so that it adds to it new actuality, and power of informing more perfectly, than without that mode, and they distinguish this mode from union itself, and from existence, and inherence, and call it the mode of rootedness. And the foundation is, because no form can give a more perfect formal effect, unless in itself, and as principle quo it is more perfect and actual, whether entitatively or modally, therefore besides union it is necessary that the form itself be rendered more perfect and actual through a mode, which gives to the form itself power and actuality of informing. But others say that the mode which is produced anew, or results through intensification does not add anything of actuality and informative reason to the form itself, but only holds itself on the part of union, and explanation of it in the subject.

The first way of speaking is not so fitting, nor does it seem to perfectly save the sense of St. Thomas, but seems to partly relapse into the opinion attacked concerning addition of entity to form, which is intended that it be rendered more intense. For if the form itself when it is rendered more intense, receives greater informative power as formal reason, therefore it receives addition of form, since informative power is not something superadded to form, but the very entity and actuality of form, for form does not inform and cause its formal effect through something superadded as the efficient through superadded power effects, but through communication of its actuality and entity it causes formally, therefore it is the same to receive greater power of informing, as to receive new actuality or entity of form. And this is what the opposite opinion says, namely that intensification occurs through addition of form or entity. And it is confirmed, because that mode cannot perfect the power of informing, which was in remiss quality, by adding to it accidental informative power, and distinct from the entity of form, for form does not cause except through communication of itself not through added power as efficient, therefore through this that that mode behaves as form, or formal reason giving formal effect of intensification, although remiss form gives real effect through some reality, which cannot stand, since intense form is all simple quality, not partly quality, partly mode, and effects corresponding to form as intense are real, not only modal, as that it is disposition to substantial form, that it operates greater effects, etc. Therefore they correspond to real principle not modal. Finally, if intensification in the nature of intensification of form is mode, since there is not greater reason concerning this degree than concerning that, for all degrees grow through intensification, it follows that every degree especially certain and aliquot will be formal effect of some mode, and what remains besides all degrees will be effect of the entity of form, but what is that which remains besides all degrees in quality; certainly nothing. Similarly in this opinion form is not intensified according to the same formal reason, but one formal effect of it will be real, and as it were essential proceeding from real entity of form, another modal and not entitative, namely which pertains to argument, and thus they are not formal effects of entirely the same nature, nor will form properly be said to be intensified, because it is not perfected in the very prior formal reason, as it is real, but receives another anew, which is modal. Wherefore this opinion does not much recede from that which posits entitative parts according to addition of degree to degree, since it admits that form giving formal remiss effect does not have in itself sufficiency, as to the very power of form, or formal reason of giving intense effect as it holds itself on the part of form, but needs addition of new formal reason, although it posits that in new mode, not in new entity of form.

But if that mode is posited as condition, not as formal reason informing, such mode cannot be distinguished from inherence, or communication of form, because required condition cannot be other than application, or conjunction to the patient, by which that form explains itself, and communicates to the subject in more perfect mode, and before all that form and formal principle was in the subject, but not totally, therefore the mode which is afterwards acquired does not pertain to informative power, and new formal reason of the form itself, but to new mode, which is condition as communication, or application anew of that form, by which not only is it whole in the subject, but totally, and in more perfect mode, without which condition or application form does not give that more perfect effect, which indeed is entitative, just as formal remiss effect, and was before had in form, because the whole was there, but is not explained totally in the subject.

And thus is understood the mind of St. Thomas who perpetually explains intensification of form through new explanation of it in the subject, not through addition of new informative power: for he says: "That intensification occurs through this, that the subject is more and more terminated by that form, and more participates in it, and acquires perfect mode of participation," as in I-II, q. 52, art. 2: "And through this that the subject is more rendered in act of quality itself," as in q. 1 on Truth art. 11: "And through this that form is more led from the imperfect to the perfect," as in I, distinction 17 cited: "And through this that quality more inheres in the subject, and is rooted," in II-II, quest. 24, art. 4 at 3. Which locutions indicate some mode applying form to subject in diverse mode, not giving new informative power, and changing formal reason.

But if you ask: How is this union changed through intensification with new informative formal reason not added, so that that mode is new union and new existence, and inherence of form in subject, it is responded that union of form with subject is required for two things. First, that one be constituted from form and subject. Second, that through such union and conjunction, form have being in the subject, because it depends on it in existing. As to this second new existence is not added to quality itself, because new entity is not added, but the whole entity of form was already had in the subject, and consequently whole existence, because existence follows entity itself as produced outside causes, hence since in our opinion the whole entity of form is in the subject, even if it is not totally, consequently even if it grows through intensification, existence is not changed, since entity is not changed, and so as to this union or inherence is not changed in the nature of medium giving existence to the entity of form. But as to the unity which form makes with subject, in this union itself grows, or is perfected, or rather form, which is changed by new action, that it affect the subject, because the subject is in a certain potentiality and indetermination to many things, and according to that can be subjected to diverse forms, or to the same form not in only one and indivisible mode, but either more confusedly and potentially, or more actually and determinately according to reduction to greater unity, and similitude with form. And thus St. Thomas explains in that distinction 22 cited this rootedness through greater reduction to unity, and to diverse mode of terminating dissimilitude, or confusion, and potentiality of subject to actuality and unity of form. And this is sufficiently done through union itself, or inherence, because it pertains to union to make unity, and remove confusion, or potentiality to many things, which is opposed to unity, therefore then form is perfectly communicated to subject, when this unity will have been perfected through union itself, and this is to be more rooted, that is, to more subject to itself the potentiality of the subject, and its indetermination, or confusion to reduce to greater unity in the manner of the root of a tree, which the more it penetrates into the earth, the firmer it renders the tree.

But you will say: Union as we said, quest. 6 Physics is not a mode mediating between form and subject, therefore if greater intensification consists in greater union, and that is not mode, intensification will not occur through addition of mode, although St. Thomas expressly admits mode in intensification, as is clear in I-II, quest. 52, art. 2 at 2.

It is responded that union in our opinion is not mode as reason, and formal medium of uniting, because form which according to itself is act, according to itself has formal reason of making unity, whether accidental or substantial, as the form itself will have been, and thus because unity which results is not modal, but substantial or accidental, therefore neither formal reason, nor medium of uniting is mode, but form itself. However we do not deny that some mode is found in union preceding or following, insofar as the extremes ought to be changed, or at least one extreme, that it be united, and made dependent, and changed to unity with the subject; the very change passively remaining in the united extreme itself is mode following union, which pertains more to dependence or state, which form receives from the force of union, than to formal reason, or medium of uniting, it pertains however to intensification, because intensification gives more the state of form in communicating itself, than formal power of informing.

ARTICLE III.

Arguments against the proposed opinion are addressed.

Many try to bring St. Thomas to the contrary opinion, and they rely chiefly on that authority, which we have already explained above, when he says in II-II, quest. 24, art. 4 ad 3, quest. 1 on Virtues art. 11: "That they are ignorant of their own voice, who say that quality is intensified through rootedness, and not according to essence," therefore St. Thomas wants intensification to occur through addition of entity and not through rootedness alone. But we have already explained this authority above, and on this St. Thomas should be seen in Quodlibet 9, art. 13, where he says: "When we say that charity is increased according to essence, an increase of the subject is denoted, so that the sense is, the very essence of charity is increased, just as when we say white is increased according to its essence, but the form specifying the motion is not designated, so that the sense would be, it is increased according to essence, that is, its increase is motion in being, or in essence, and thus increase is said to be according to quantity." See how St. Thomas interprets what it is to be increased according to essence, not indeed through addition of new entity, as if the motion of increase were to new entity as to a terminus, but because the essence itself is the thing which is increased. Nor does it matter that sometimes St. Thomas denies that charity is increased as the subject of increase, for he denies that charity is called the subject of increase as of inherence, and as quod and sustaining, not however that it is called the subject of modification, because it is the form itself, which is explained in a distinct mode and communicated to the subject, and thus is modified by communication itself.

It matters less, what is adduced from St. Thomas II p. q. 7, a. 12, where he expressly admits that there are degrees in heat, and consequently intensification will occur through addition of degree not through rootedness. And finally the testimony of the Philosopher is added from Physics 4 text 85, where he says: "That just as from hot cold comes to be, and conversely, because the same which was in potency, so also from hot more hot." If therefore Aristotle parallels the eduction of more hot from less, to the eduction of hot from cold, just as this occurs through production of new entity, so also that. Nor is eduction of new mode sufficient, because this cannot be understood in real forms, except through new entity depending on the subject, therefore where there is given greater eduction of form, there is also given production of entity.

To these it is easily responded, that in the first place St. Thomas does not understand by the name of degree a new entity added to the preceding entity, but a new participation of the same in the subject, and this is fittingly called degree, because just as the soul through the degrees which it has explains itself in diverse mode in matter, the same entity standing, and does not give the same degree and formal effect to all parts, so quality explains its actuality to the subject in diverse mode; and diverse degree is not diverse entity of form, but the same communicating itself in diverse mode, and giving effects.

To the second place it is said, that from less hot more hot comes to be just as from cold hot, not as to the entity produced, but as to the entity to be produced, because in both something new comes to be, and there is had a terminus a quo, and ad quem, but nevertheless when hot simply comes to be, it comes to be from potency to hot, but when more hot comes to be from less hot it is not in potency to form, but to mode of participation of form as St. Thomas says I-II, q. 52, art. 2 ad 3, but what is said that there is not given eduction unless there is production, I distinguish; eduction of form as to entity is not without production of entity, granted; eduction of form as to new explanation, and mode of participation in the subject, is not without production of entity, denied; for it is only betterment of educed form, and only production of mode, not entity of form.

Secondly it is argued by reason: Because intensification is a motion really distinct from the first production of quality, and is true alteration, therefore it ought to produce a reality distinct from the first quality, and not only some mode, because alteration first and per se is to quality and not to mode, and because intense virtue by reason of intensification has greater power of producing, than non-intense, because it produces more perfect effects, but mode is not virtue, nor does it produce real effects, which specially correspond to it. Nor finally can there be given new mode of inherence or union, unless new inhering entity is added, otherwise the same entity would inhere by double inherence, therefore it is necessary, that what is added be distinct entity just as it is distinct motion but where motions are really distinct, also termini ought to be really distinct, otherwise if it were the same entity, also motions would be identified among themselves, because those which are the same really to one third, are the same among themselves. It is confirmed, because otherwise if intensification did not produce quality, but mode it could through production of mode alone produce quality, which is clear, because motion of intensification does not have a minimum, but begins according to succession, not through first changed being, but through last non-being, therefore if through intensification entity is not produced, but mode, quality can begin through intensification from the last non-being of degree, and thus the whole quality will begin through modes.

It is responded that intensification is a motion really distinct from the first production of quality since it can proceed from a diverse agent, and for diverse time, and similarly it is terminated per se to quality as true alteration, not however to quality absolutely and entitatively, but to quality under such mode, namely as to be perfected, and bettered, just as transubstantiation is action to the body of Christ, although it does not produce it absolutely, but under new mode; and in this intensification differs from other motions, because in others something distinct from what was there is acquired, as in augmentation new part, in local motion new ubi, and place; but in quality what was there before is bettered, and perfected. Hence it is not required, that it produce new form, but that it attain the same under more perfect mode: but for this, that motions or actions be really distinguished, it is not required that the termini be really, and entitatively distinct, as if materially, but it suffices, that formally, otherwise every mode, which is produced in the subject, as sitting, ubi, etc. ought not to be produced by distinct real action. But when it is said, that whatever are the same to one third, are the same among themselves, in the first place it is understood when they are the same to one third simultaneously, and not for diverse time. Then, that they be the same to one third in reality and reason, that is, under the same reason and formality, not the same to one third, as if materially, and according to diverse formalities, or according as something is virtually multiple, as St. Thomas understands I p. q. 28, art. 3, otherwise that axiom has many instances. But what is added that intense quality by reason of intensification has many real effects, which correspond to it insofar as intense, it is responded that these effects do not correspond to quality according to itself, nor to the mode of intensification superadded alone, but to the real entity of form itself as it is under such mode, and therefore that some virtue, or form produce new effects, addition of entity is not required, but the same entity suffices according to diverse formality, and communication of itself, just as the same soul according to sensitive degree produces diverse real effects, than according to vegetative, nor however does it require new entity to be superadded to those, but the same to be communicated in diverse mode in matter. But what is said, that new inherence postulates new entity, it is responded that new inherence of form not had before in the subject, also postulates new entity of form, but of form had before in the subject does not postulate new entity, but communicates the same to the subject in new mode of participation, and thus it does not so much give new inherence absolutely, as new termination of inherence, as will be said in the last argument.

To the confirmation it is responded, that if intensification does not find quality in the subject, but produces it first, then it produces not only mode, but also entity, but if it finds produced quality, it only superadds new mode, not new entity, just as transubstantiation of the body of Christ if it did not suppose it in the nature of things, would produce it substantially, but now it does not produce it, but converts bread into it under new mode.

Thirdly it is argued: Because where there is real separation there is real distinction, but one degree is separated from another, e.g. second from third, or from fourth, as is clear in remission of quality, therefore these degrees are really distinguished, and especially since we see that continuation of heating is similar to first production, and of the same species, and true and proper action, and change, therefore it postulates real terminus, and entity, for there is not change without newness, nor action without produced terminus. It is confirmed, because activity of agent virtue becomes greater through addition of parts, and multitude of form, just as glowing iron acts more actively, than flame of straw, therefore also intensification will occur through addition of parts, since that is intensification which makes some virtue more active.

It is responded that degrees are never separated from quality, but quality from them, that is, from any of them separately, although not from the whole collection, which is a sign of modal distinction, just as body is separated from any site, or ubi, but no ubi from body. But what is said about continuation of heating, it is responded that it is continued by reason of quality itself or form participated, and thus is action of the same nature with first production of quality, it is however diverse on the part of mode of participation; and for producing such mode distinct action and real change is required, for also modes are produced through real action as we have said, just as ubi and site, and other similar, and thus such change is with newness of being at least in mode which is produced terminus. To the confirmation we will speak in the following question treating of action, and reaction, and in quest. 7, treating of density, where we will show, that by reason of density, or multitude of parts, there is not given greater intensification of quality except by occasion of those parts the agent produces more intense quality, for of itself multitude of parts only conduces to conditions of activity, namely that the agent operate more swiftly, or with more perfect application, which conditions however being posited the agent can produce more perfect, and more intense quality, as we will say more broadly there.

Fourthly it is argued: Because intensification cannot occur according to more perfect mode of union, or inherence, therefore it ought to consist in some addition of new entity. The antecedent is proved, because the union and inherence of quality is not divisible, but always the same, because it inheres naturally in the subject, and thus inheres as much as it can; similarly it inheres and is united wholly, therefore it does not appear how this union can increase, especially when the entity of quality is indivisible, as spiritual quality, and is intensified in the same indivisible subject. Then, because in remission itself it does not appear by what that lesser union or rootedness of heat is produced, for when heat as six is remitted to two, there is not that by which the union of heat as two is produced, not by the remitting agent, e.g. by water remitting heat, since it is rather a contrary agent, which cannot produce heat as two, nor by some other agent, e.g. fire or air, because they do not have influx in that remission, if it is the case that then fire is not approximated, but only remitting water. And moreover, if any gradual mode, e.g. as two or as four were indivisible, then if it is remitted, either that whole union perishes, or nothing, if the whole perishes, remission will be corruption, because with the whole union perishing the whole united form perishes, if nothing it is intense. And it is confirmed, because if intensification consists in greater union, therefore quality as intense, will not be able to be separated from the subject, since with union standing it cannot be separated, but removed, therefore if intensification consists in union, as intense, it will not be able to be separated, and thus if God separated the whiteness of snow and the whiteness of man, that would not be more perfect than this.

It is responded that that union has some latitude, as was shown above by many examples. And when it is said, that it inheres naturally as much as it can, I distinguish; as much as it can according to the exigency of the subject, and disposition of the agent, granted; as much as it can absolutely from the force of form, denied. And because such dispositions are required that quality be intense, therefore that natural union always does as much as it can according to the exigency of the subject, and capacity; but all impediments being removed and the required disposition being posited on the part of agent and patient, it does not stand that quality not be intensified, and that intensification then does not occur without intrinsic perfection of quality, because the very order of participation to the subject thus disposed, is something intrinsic to quality.

To the other part of the argument, by what the remiss degree is produced with the intensifying agent removed, I say that it proceeds from a twofold cause, one per accidens, namely from impeding that more perfect and intense mode of union, insofar as the subject is rendered indisposed, and unable just as he who removes the dispositions that the soul be in the body, kills the man. The other cause is per se, namely the very form from which that remiss mode emanates from the force of the prior action, which was united to the subject by the agent by which it was produced, which action of the producer, although it is not formally given now, nevertheless virtually remaining the produced form which was its terminus, for it was united to the subject in such a way, by that stronger and more perfect union, that it virtually retains the inferior and more remiss union, if dispositions to the more perfect are removed, because the less perfect is virtually contained in the more perfect, just as if the point terminating the line is removed, another results from the force of the prior production of quantity: but these modes of intensification are as it were certain terminations, by which form more terminates, and subjects to itself the potentiality of the subject, but it is determined, that this degree result rather than that, for example, as two or as three according to the greater or lesser impediment of the opposed agent, and disposition of the subject.

Finally, to what is added about that mode if it is indivisible, it is responded that that union is indivisible entitatively, just as the form itself, but divisible virtually, because as we said above, according to the unity, which form makes with the subject, and actuality, by which it reduces it to its similitude, that union has to grow more and less, because although form is wholly united, but not totally, and thus it stands well that it be indivisible entitatively, but divisible respectively or virtually, because not under every respect, and formality, by which it can be participated, is form united, even if it is wholly united, as we will explain more immediately in the following argument.

To the confirmation it is responded, that intense quality can be separated, and will be called intense not by reason of actual union to the subject, for this is destroyed with separation made, but by reason of order and habitude to the subject in which it seeks to be not in any way whatsoever, but with such or such mode of participation, which pertains to intensification of quality. Hence just as in separated accident inherence does not remain in act, but in aptitude, by which it respects the subject to which it is owed, and this respect is not in potency, but in act in the separated accident itself, although inherence itself is not in act, so there remains respect of such, or such mode of inherence according to which intensification occurs, and although it does not have that union in act, nevertheless it has respect in act, and aptitude that it be thus united, and by reason of that it is called intense in act through order to the subject not to which it is actually united, but which it actually respects, and which is owed to it, that it be united in such mode.

Lastly it is argued: Because through this that intensification occurs through this rootedness we do not avoid the inconveniences of the other opinion which posits through addition of parts, for either we posit many unions of the same form which is thus rooted, and explained in the subject, or one if many, therefore now we admit in the same subject many modes diverse in number, which in the other opinion we intend to avoid, lest it posit many accidents distinct in number in the same subject. If one either it is divisible, or indivisible, therefore with intensification made, or remission, any union will be corrupted, since intensification consists in greater union, and consequently corrupts the lesser, and if it is divisible it corrupts the whole, but with union corrupted united form is corrupted, and thus we will fall into that opinion which said intensification occurs through corruption of one part, and addition of another. And then, if any motion of intensification is indivisible, therefore it cannot terminate motion of intensification, because motion not only requires indivisibles, but also parts, since motion is divisible. Nor can it be said, that entitative union is indivisible, and virtually divisible: for since quality itself is said to be intensified according to modes, and not according to entity, and we say these modes are unions, therefore in them we ought to posit divisibility, and latitude; but if we posit, that entitatively they are indivisible, and virtually divisible, again there will remain another mode of such union, by which it is rendered divisible, and concerning that again the same argument will be made whether it is divisible, or indivisible and so to infinity. But if it is said that union is divisible through parts, the foundation of our opinion falls, for now we posit parts in union, and so if in that it does not repugn notwithstanding its individuation in the same part of the subject, why will it repugn that diverse parts of quality be given in the same part of the subject? Indeed from this an argument is deduced against our opinion, because through motion of intensification not only are indivisibles acquired, but also parts according to distance, and latitude which it has. After therefore it has acquired degree as two for example, immediately after it cannot acquire something indivisible, but divisible: that divisible therefore, either is part of mode, or of quality, if of quality, we have the intent; if of mode, therefore mode is divisible, and consequently also united thing.

It is responded that the union of intensible quality is one, and the same entitatively, just as also the united form itself, to which it is altogether proportioned, but it is divisible terminatively, and respectively, insofar as it makes greater, or lesser unity of the subject, with form, because it is more assimilated to it, and confusion of potentiality, which is in the subject to many things is removed and it is reduced to greater subjection to form itself, which is to make greater unity, and agreement with it. For as we said above form obtains two effects from union, the first is to have existence dependently on the subject to which it is united, and as to this we said union is not varied, because existence follows the very entity of form, which entity is indivisibly the same as has been said: the second effect is to make unity, and agreement with the subject, and in this it admits latitude, not in the very entity of union, which is not distinguished from form, but in the very termination and respect of greater agreement. Nor is this to give mode of mode, or to proceed to infinity, but quality itself united is diversely perfected in unity, which union makes as to its termination by which greater agreement of it with the subject is made by reducing confusion of potentiality to unity of form; and thus there does not remain another mode of union, but another effect of union itself according to diverse termination to the subject, and diverse unity, which it makes with it, and in this termination, or effect of participation, and agreement that union is divisible, and this is to be virtually divisible, that is, by reason of effect, and termination, but to be entitatively indivisible, that is, on the part of entity, or united form. But in these effects, or terminations there is not to give many simultaneously in the subject, but successively, because when quality is intensified, the preceding termination of remiss degree is destroyed, and new is acquired, which is more perfect, and contains the whole nature of the preceding degree, just as tetragonal figure contains trigonal, that is, figure of six angles figure of three, and just as in quantity when it grows, the preceding termination is destroyed, and new is induced, but not two terminations are simultaneously, nor two figures, and thus it is never saved that two modes, or two terminations distinct in number alone are simultaneously in the same part of the subject.

To the instance which is made on the part of motion of intensification it is responded that although any gradual termination is indivisible, nevertheless between one termination, and another transition is given through mode of latitude, and distance in becoming, not because there are parts of quality to be acquired between mode and mode, but because the mode itself, which is acquired while it is in becoming, is through divisible mode, while it is in having been made, it is through indivisible mode, just as in local motion, changed being is indivisible, and between two changed beings permanent parts are not given, but flux and becoming, which through changed being is terminated, and constituted in having been made, for it is not proceeded from one indivisible to another immediately, but through flux and becoming, which has latitude to be overcome. Wherefore it is not necessary to motion whether local, or of alteration to assign many partial unions, nor many parts of quality permanent and in having been made simultaneously, but only in becoming, and tendency, by which from one terminus, and changed being transition is made to another through flux, and tendency, and when alteration is given in quality from one extreme to another, or from quality of one species to another, and transition is made through diverse middle species, between any middle species motion is given, and nevertheless intermediate parts are not acquired, but from one species transition is made to another, but the middle is not some partial species, which is found there, but the very becoming of quality, and flux, tending from one extreme to another is the very latitude to be overcome through motion, because between any having been made there is given becoming. If therefore it is not necessary in intensification to signify indivisibles, and entitative permanent parts, of which one is added to another, and composes with another, but it suffices that successive transition be given, and flux, or becoming from one termination to another just as when in quantity one terminating surface is removed, and transition is made to another, immediately after termination is not found, since immediately after part follows, but tendency to termination is found, that is, to another surface. But what is said by Authors of the opposite opinion about permanent parts of quality, and indivisibles uniting them, is to make quality like the continuum, and in the mode of extensive increase of quantity, as St. Thomas said they imagine who think quality is increased through addition in I, dist. 17, quest. 2, artic. 2.

QUESTION V.

ON ACTION AND REACTION.

Aristotle treats of action and reaction from chapter six of this book up to the tenth. But we treat of it immediately after the treatise on intensification, because reaction and repassion is a certain general condition in physical alterations, and those tending to corruption, but mixture and similarly condensation and rarefaction are alterations less generally agreeing, and therefore we will treat of those after action and reaction.

ARTICLE I.
Whether something can act on itself at least per accidens?

This is the first condition required for action and reaction, namely that there not be identity between agent and patient, and that such a condition is required for acting per se and directly on some patient we treated in Physics VII q. 22, but whether at least per accidens and as it were consequently something can act on itself, namely when by acting on another it is reflected to itself, we will treat in the present; for this happens either through reflection or through antiperistasis. First it is necessary to explain more fully those foundations which we handed down in Physics VII, for on them depends the whole resolution of this truth.

Therefore as certain in Philosophy we proposed in the aforementioned place that axiom of Aristotle is to be held that everything that is moved is moved by another, which we said is verified universally of every agent through motion, or proceeding from potency to act, and is explained by St. Thomas concerning that which moves and is moved per se first, to exclude that which moves itself by reason of parts, so that one part is moving and another is moved, for such a mobile is said not to move nor be moved per se first, but through part, but what belongs to something through part does not belong per se first, indeed the Philosopher calls motion in part motion per accidens in Physics V, because it belongs to the whole itself through another, that is, through the part itself which is distinguished from the whole otherwise if we understand that axiom, that everything that is moved is moved by another, that is, by another distinct supposit, it would be falsified in living things, in which one part moves another, or from one act is proceeded to another, and thus they are said to move themselves. Therefore the aforementioned axiom is understood that everything that is moved, not first and per se itself, but is moved by another, whether it be other as something distinct, or whether it be as part, or as diverse act from act of end motion is made to means, from principles to conclusions: but that the same thing first and per se be moving and moved is impossible, and this we say is to be held as a principle in Philosophy, because it is founded in the very essential nature of motion, which is from something to something, from potency to act, that is, through that which it has of act to that to which it is in potency. Hence the Philosopher in the present book I On Generation text 48, inferred against Democritus, that if like acted on like, also the same would act on itself, as if this were the greatest inconvenience, nor could it in any way be admitted.

However, from a twofold head this axiom can be weakened and restricted. First, by saying that the same cannot act on itself, and on the same part by generative or corruptive motion, for nothing can generate itself, or destroy itself, but by other motions as local, and of augmentation, and much more by spiritual motions the same can act on itself, and move itself. Second, that the same cannot act on itself, or move itself according to the same reason, but well according to diverse, that is, according as it is in act it can move itself, and according as it is in potency be moved. Nor does it follow that it will be simultaneously in act and potency in the same way, but virtually in act, and formally in potency. In sum it suffices to have active power in itself, that it can act on itself as on a subject, and through form on matter and St. Thomas favors question 8 On Truth article 6 ad 7, where he says: "That although something which is in essential potency, cannot reduce itself to act, but through another, nevertheless what is in accidental potency as having habit, while it does not consider, can through itself go out into act, unless it is said that it is reduced to act through will, by which it is moved to the act of considering." But what is said to be required for motion, that from one part motion pass to another, and therefore first the moving power itself ought to be in act moved, than it move, and change what is in potency we are not forced to understand concerning act of motion, by which the mover is constituted in act, but concerning motion itself which is effect, which since it happens successively, part is attained first, than another, and thus is said to go out from one to another.

Nevertheless these explanations are not sufficient, but the proposition brought forth ought to be understood in all its latitude, and universality in whatever genus of motion; and so where progression from potency to act is found, it is necessary that it not move itself according to the same act. Nor does it suffice to have operative power through which something is said to be in act for moving itself as it is subject receiving motion, but it is necessary that it be constituted in act beyond power itself through some motion, by which it is moved to another part of motion, or to another act. And this motion through which it is in act for moving, it cannot have from power itself, since that in order to operate, requires motion, therefore when it first operates, it has that from another, for it cannot have from itself except by operating, nor operate except by supposing motion. The reason for this is, because moving and acting power is only principle quo of acting, and similarly is of itself indifferent, and in potency to many actions at least in individual. But from the fact that it is principle quo, it follows that it is not moving, but reason by which something moves, because every principle quo ought to be of something which behaves as principle quod; hence that which moves, is subject in which is such power, therefore it is necessary that it concur with such active power, not as in potency, nor as patient from it, but in act and as principle quod, and therefore as such it does not suffer from such power but acts through it. Nor can the opposite be perceived, except by imagining, that heat not however the hot itself is heating, or moving, which is to say that heat is not principle quo of heating, because principle quo is that, which is for something reason of acting, and thus supposes another to which it is conjoined as to agent, and mover quod through such heat: never therefore is power which is principle quo moving, and its subject is moved by it since by this very fact that I say moving power, there already is understood subject moving as quod, therefore power is not distinguished there as moving, and subject as moved, but both as moving with respect to matter, both because form is only reason of acting as quo, it indeed substantially, and primarily, but active accidents, as its instruments, and thus the same reason runs, as concerning those; and because matter alone is not capable of motion properly said, but only of mutation; for motion requires complete subject in act, as is clear from the Philosopher, Physics V and there we noted question 19.

But from the fact that this motive power is indifferent, and relates to many things at least in individual, it follows that it itself does not suffice to move determinately, and in singular unless as moved, so that it ought to be first in act determinately, than it reduce itself from potency to act. And the reason for this is, because if some power is in potency to producing something, and not in act, it is necessary that in order to produce that it be moved or changed from potency to act, because from potency as potency, that is, as it is in potential state action does not proceed; for although from active potency, as it is active, action proceeds, nevertheless insofar as that activity has potential state, action does not proceed, unless such state is removed, and its very removal is to be moved, but we call potential state, as long as some power is not ultimately determined to some operation, or effect, but so can operate this, that it is still suspended that it operate another, or can also be impeded, and not operate, for then something remains that either it be expedited, or impediment be removed, or that suspension be removed, and it be determined in singular to this rather than to that, and much more if it ought to be determined to the very species of act, or to some required condition. But nothing else is to be actuated, or to have actual state of acting, than to be ultimately determined by determination removing potentiality and suspension, not removing power and universality of acting diverse acts, because potentiality, as long as it is not determined, is not adequate to act or effect to be done, nor fully proportioned for something always, by which ultimately it be adequated to it that action go out in singular. That power therefore which operates by supposing potentiality to operating, it is necessary that it be changed from such potentiality to actuality, and such change cannot be born from itself, because in order to be born, potentiality ought to be removed, therefore it cannot be removed from potentiality itself, but suppose that it be moved, and thus potentiality being removed it will operate.

But if of itself it is sufficiently determined in act, and in no way in potency, it will operate not through motion, and by passing from potency to act (concerning which alone we speak in the present) but either through simple emanation, or through act excluding all potentiality to acting which is pure act. But emanation, although with respect to essence, from which passion flows it does not say motion, but simple dependence, nevertheless because this essence is had from the generating producing form, namely proper passions, with respect to such generating and moving, it is already supposed to be moved by another, and not by itself. Wherefore power proceeding from potency to act in operating, it is necessary that it proceed as moved first by removing such potentiality and this not from itself, but from another, because it cannot be removed except through operation, but it cannot operate, as long as it is in potentiality, therefore potentiality is first removed than it operate, therefore it ought to be removed by another, and since there is not process to infinity in movers, it is necessary that first motions of some operating be reduced to extrinsic causes, and those finally to first cause.

Nor however on account of this are all these motions reduced to proper generating, but we say that to first cause, because in order to be reduced to generating, it is required that such motions be, that they pertain to the very first state, or first instant of nature and nature as generated, and to motions which are of nature as nature, because namely they are motions by which it is moved, not precisely move another, just as heating of fire is not operation given to it by generating, because in that motion of nature is not explained, because in that it is not moved, but moves another.

From which doctrine is gathered first, that also living things in their first motions, by which they are constituted in act, that they can move themselves to other acts, need extrinsic mover, because also in those first motions they are truly moved, and operate by going out from potency to act. And it stands well that living thing elicit actively that first motion, and nevertheless not move itself, but be moved from extrinsic, because that first motion does not behave as proper passion of the living thing itself behaving merely passively, but is proper action, as vital going out, and elicited from it, in power however of generating, and moving extrinsically, because it is life had and participated from another, and consequently can be moved and begun from another. And thus motion of heart and first motion of intellect, and of will are from extrinsic mover although they are elicited from intrinsic, because since more perfect of living thing consists in it operating, and in resting, and this is operation of life, by which namely it moves itself, but it is moved because through motion it moves, it is necessary, that by generating be given to it, not only power of moving, but also power moved, that is, constituted in act that it move itself, since power is not in act, but in potency that it move, and operate, and so it needs to be moved, and be moved that it move, therefore it is necessary, that by generating power of living thing be constituted moved, because it pertains to first state of nature of living thing, and cannot be moved by itself for the reason said, because in order to constitute itself moved, it ought to operate; but operation since it happens through motion, supposes to be moved, therefore that first motion ought to be made not by itself, but by another outside, namely by which life itself is participated, and therefore in first motion of participated life it is not necessary, that living thing move itself, but that it participate motion of life, and inchoatively live not completely, and consummately; for it begins by that motion to move itself, insofar as it is constituted in act that in following act it move itself, and because this is owed to living thing in the very first instant, because it is proper perfection, and owed to it, therefore just as inanimate thing is generated as resting in proper place, because rest is owed to it, but per accidens, if it is not in proper place, it is moved by generating, that it tend to that, so it is necessary that living thing not be generated as resting, but as moved that it move, and thus it pertains to generating cause to give motion of heart, which is first motion of life, and to generating spirit it pertains to give first motion of intellect and of will, by which it begin to move itself in that genus of life, for also intellectual life in us is participated, and operates by going out from potency to act, and thus operates as moved.

Secondly is gathered that first motion of heart, or of intellect or of will, or whatever other first motion of whatever thing, cannot be deficient if it is given de facto, unless the very mover effect it, just as if generating is weak, it will also be able to produce motion of heart weakened, and similarly if intellect and will could be moved in their first motion virtually, or formally by some deficient agent that motion could also be defective. And I say formally, or virtually, because although in every operation which begins anew, God is first mover, and predetermining formally, nevertheless if other acts are supposed to have preceded, so that that operation is not simply first of all, then in virtue of preceding acts motion of this new operation can begin; nor is God held to move according to His mode, but can accommodate Himself according to mode left virtually from prior acts, and therefore in other operations which begin anew someone can begin defectively without this that defect be attributed to first mover, but to prior disposing. But in motion which is first of all, nor supposes another even as disposing, its determination cannot arise from some prior act, nor according to it first mover accommodate itself to moving, and so neither formally, nor virtually is it moved by itself, but only by first mover operating according to His mode, and not according to accommodation left from some prior act in the mobile itself: hence from force of such motion no defect can follow in mobile. And although on account of indifference of its power and liberty, it can not operate, and not follow that motion of first mover, because He moves not by forcing liberty, nor by removing, nevertheless from this it does not follow, that that mobile can be deficient, and sin, but only can not do through negation, or suspension of act, not from force of dictate of something deficient, without which no omission, or sinful commission is voluntary. And so it is one thing to be able not to do, as much as is from merits of power and object, which pertains to liberty that it not operate by coercion, another is to be able not to do by sinning, which requires to do with deficiency in willing principle and in dictate proposing, which dictate in that state of first operation is not giveable, since it is moved by God alone, just as neither in beatitude by reason of best state, nor in Christ by reason of Divine Person. And thus from being able not to do to being able not to do by sinning, always appellation is changed even with respect to the same act.

Thirdly is gathered, that immanent act although it is received in agent, nevertheless is not the same moving, and moved first and per se, and similarly in emanation of passions, as of cold from heated water. Concerning the first it is clear, because although it is the same agent and receiving action, nevertheless it is not the same moving, and moved, because as has been said it is one thing to elicit act, another to move and be moved, for also eliciting power ought to be moved that it elicit, and thus it is first to be moved than to elicit action. But it is not against reason of active power that it be in potency to sustaining action, and that it inhere to it: it is however against reason of active power that it act, and elicit action if it is in determinable potency, and suspended to acting, which in determinate cannot be removed from it through its operation, since in order to operate it requires to be determined, and therefore to be moving, and moved are opposed concerning the same as potentiality of indetermination, and actuality of determination to acting, but power sustaining in being, and receiving through inherence, does not fight with active power itself to acting, because to be able to sustain some action or form is also founded in actuality of being, because it is more perfect to be sustaining, than inhering. Besides that immanent action does not according to the same proceed and is received, for it proceeds in intellect from power and species, but is received in power alone; but in will it proceeds from appetite as actuated through proposition of object and moved by cognition, but is received in power of will alone.

But what pertains to emanation of proper passion we have already shown in q. 12 Physics and q. 23, how emanation is not distinguished from action of generating, and so it already supposes something distinct from which it proceed, and from which it be, which again we will show more fully, q. 2 On Soul, a. 2.

Lastly, it follows well that something can move itself through this that one part moves another, which can also be verified of corruptive motion. This is clear, because in living thing one part acts on another, and one sick part can corrupt a healthy one, and nutrition happens through this that one part corrupts food, and generates flesh in something closer to itself. However it cannot effectively generate itself, because thus it would be as it generated, and would not be, as it would be generated, and consequently, neither can it effectively corrupt itself by proceeding from non-being to being, because corruption follows generation, which is always concerning another, not concerning itself.

On antiperistasis.

Having supposed that nothing can act on itself immediately and directly, which is to act per se, it remains to see whether it can per accidens, namely according to some reflected action. This reflection happens in two ways: in one way through this alone, that some action finds some obstacle lest it pass further, but the quality received there again acts on its agent from which it was educed, or on the medium through which it passed, and thus is rendered more intense in the medium itself. In another way some quality is found to increase, from the fact that the agent is surrounded by a stronger contrary, which surrounding being posited, the quality reflects to itself, because it cannot pass through the contrary, but then reflected ejection does not happen from the contrary, but only surrounding resistance, which cannot overcome the whole activity of the contrary agent, and therefore is reflected from that into itself, and more intensifies itself. And this surrounding resistance in Greek is called antiperistasis, as if surrounding, and surrounding resistance of the contrary. That this antiperistasis occurs is proved by experience, for we see in summer underground waters are colder, in winter warmer, because in winter with cold surrounding, and constricting the earth, heat which either from summer, or from hot exhalations was enclosed there, is not permitted to exit, and so returning to itself intensifies the heat of the water: but in summer being relaxed that heat is permitted to exit, and water returns to its coldness. It is asked therefore how that quality acts on itself, and intensifies itself, and by what that antiperistatical action is done?

In which it must be supposed, that through such antiperistasis quality is truly intensified, and perfected, not only according to appearance, nor only according to condensation, nor according to intentional action but by true and proper intensification. Which although some have denied, nevertheless in this part experience must be trusted, which is the mother of Philosophy, since no reason stands in the contrary, which corrects the experience of the senses. And Aristotle posits such antiperistasis in Meteorology I, and there St. Thomas XIV and XV, where he reduces this to the experiment, which we have already brought concerning underground water in summer and winter. Nor can it be said, that there is deception of sense, as if a hot hand applied to fountain water would seem to itself colder, not because it is cold, but because the hand is hot. For against this, the same hand touching another common water and that underground water feels the difference between this and that, therefore it cannot be reduced to the disposition of the hand alone, which is only one, but to diverse disposition of water; indeed if hands are rendered cold as in winter, and touch that fountain water, and another hot water they discern difference of coldness in that, and not in this, therefore there is not deception of sense there. Similarly this does not happen through greater condensation, or rarity of water, both because denser water such as sea water, if it is not placed within the earth is not felt cold, therefore that coldness does not come from greater density nor heat from greater rarity, because with the same rarity standing, hot water is rendered within the earth, and not outside: besides that the same difficulty remains, from what cause that greater condensation, or rarefaction comes, and it seems ridiculous to deny experience of greater heat, or cold, which we experience in water and affirm of rarity, and density, which we do not experience. Finally, neither does this happen through intentional action alone, and not through physical intensification of heat or cold, for intentional species which are only representative, do not intend the quality itself alteratively. But we see through antiperistasis real and physical effects, which cannot be reduced to intentional species, as when water so cools, that it freezes, or exhalation so heats through antiperistasis that it ignites: therefore this cannot be reduced to intentional action besides that heat, or cold do not emit from themselves intentional species more perfect than themselves, therefore from such species greater intensification of real quality cannot happen, because intensification happens from greater and more perfect power, and from the same reason it cannot be said, that in antiperistasis reflecting quality, without another cause intensifies the pre-existing, because reflecting quality since it originates from the pre-existing, upon which it reflects, cannot be of greater power, than that from which it proceeds, therefore through itself alone it cannot intensify it, because intensification happens from greater power, and like cannot act on its like, as we will say in the following article.

Wherefore these being dismissed it must be said, that that greater intensification caused in antiperistasis has cause per accidens, and cause per se: cause per accidens is resistance of the contrary, by reason of which action is impeded to pass beyond, and is refracted when the resisting contrary is not so vehement, that it can totally extinguish the contrary, yet so strong, that it can refract. But cause per se of such intensification sometimes is intrinsic and particular cause, sometimes extrinsic and universal. It is intrinsic and particular cause, when antiperistasis being posited it grows in quality innate to it, and coming from its viscera, e.g. when with heat surrounding water cools more, as well waters in summer. And then we say that just as cold emanates from water itself, and only on account of opposed impediment did not emanate in all its perfection, so with contrary resisting there is reflection of cold itself, impediment is more removed, and water itself is better disposed to emit more perfect coldness, both because nature strives to overcome the contrary, and so for greater conservation of itself acts more strongly; and because with cold reflecting, proximate body, which touches water, remains less hot and less impeding emanation of it, for by cold reflecting on it it is affected; and finally, because with heat surrounding, burnt exhalations evaporate, if any are left there, and thus water is rendered less oppressed, and more free, that it reduce itself to its property.

But whether if through antiperistasis something grows in quality not proper, but extraneous, as when water becomes hotter, or dry exhalation also heats more, which quality cannot emanate from the nature itself of water or exhalation, then it must be said, that direct cause of that greater intensification is that agent, which first placed power of heat there, which if it is not sufficient for so great intensification, and nevertheless quality grows in it, then it is necessary that it be helped to that greater intensification, or even to generating fire by universal cause, which is heaven, to which it pertains to succor defects of this kind when there is no proximate agent determined by which effect happens. But heaven with necessary dispositions posited acts up to substantial form, just as when an animal is jugulated, or suffocated, noose or iron do not generate cadaver, but by removing dispositions required for temperament of animal, and positing which suffice for inanimate, heaven itself generates form of cadaver. But because heaven as universal cause is not determined to producing such or such form, except some disposition being posited on the part of inferior body, therefore extraneous quality is intensified through antiperistasis, even up to generation of some substance, where by grace of fire, disposition there is greater congregation of heat, and its reconcentration from surrounding of cold, as St. Thomas teaches Meteorology I, lection XIV, and so that congregation of hot is disposition, but production of more intense heat, or even of fire, is from heaven, since extrinsic cause of this extraneous quality must be posited, and that agent which first produced it does not suffice, because as we suppose it produced weak power: therefore it is necessary that it be reduced to heaven, which is extrinsic universal cause. But what some, as P. Suarez disputation 18 Metaphysics section 9, number 13, and Rubio here say that water is rendered hot in winter on account of hot exhalations, which were extracted by the sun from earth, but were perfectly elevated, and therefore remained around earth or water, and heat it, this does not suffice: both because not always is so great a copy of exhalations extracted from all subterranean places, nor does it stand to us concerning this, and nevertheless in all subterranean places water is found hotter; and because the same difficulty remains, how those exhalations can intend that heat in water beyond proper degree of heat, which they have from this alone, that they are surrounded by cold; and finally, because already for direct cause of that heat is assigned that agent, which impressed such heat on those exhalations which was the sun; hence if that heat is more intended, neither is it to recur as to direct cause to the sun itself, which first produced that heat, or to some stronger cause which intends that heat, which does not appear other, than the sun itself or heaven.

From this antiperistasis are born many effects, which appear wonderful because they have for cause contrary resisting, just as that lightning is generated within humid cloud in dry exhalation, that water being thrown on quicklime, or on coals heat more strongly erupts, because through humectation some parts are condensed, and more hot vapors are resolved in lime, or heat is also more strongly intended in coals against that cold, and humectation of water condensing parts of coals and many other examples can occur, concerning which in the book of Meteorology. In all these however the same is not moving and moved, but they are reduced to diverse, both on the part of direct cause, and per accidens, as has been shown.

On intensification of medium through reflection of quality.

It happens sometimes that quality emitted through some medium, some obstacle being found more strongly alters the medium itself, just as rays of the sun sometimes emitted are reflected, and heat the medium itself; on account of which this last region of air is hotter than the second, where clouds condense, because reflection of rays does not arrive there. And it is doubtful from what cause that greater intensification happens, if indeed both direct rays, and reflected are of the same intensification, and therefore either like will act on like, or the same on itself. And not only through that reflection is heat which is contained only virtually in light made more intense, but also light itself is more intensified, just as we see, that light of candle if opaque body is placed behind it more intensely illuminates the medium itself, because from opaque light rebounds to medium. But we suppose in that reflection these qualities are truly intensified, whether heat, or light, because continuous experience testifies to this, since we see not only the opaque body itself, whence reflection happens, but also the medium itself is rendered clearer or hotter as is clear, because if in the medium itself writing is placed it is more easily read, and better seen, therefore it is a sign that light itself is intensified in medium, and so it cannot be recurred to greater density, because air itself is not denser in reflection of rays, than in direct emission. But to say that that light is not intensified, but that more lights numerically distinct are placed in the same subject, just as when more candles are lit in some place, this is impossible, because two numerically distinct accidents are not in the same subject, as we will show in q. 9, which if they were posited, they would be united into one, just as two waters become one water, when they are conjoined, but more candles illuminate some place more, because each touches a diverse part, in which was weaker light, and so they illuminate more than if there were only one candle, and therefore it is not similar. Wherefore it remains to inquire from what cause that greater intensification of light in the same part of medium comes, for neither can it be reduced to density alone of opaque body whence reflection happens; both because opaque density does not import greater light, nor can it intend that which it receives, since it is quality of diverse nature; and because light does not pass the first surface of opaque body, otherwise if it passed, that through which it passes would be transparent, and not opaque, but if it is received in surface alone, there is not density there, by reason of which light itself is more congregated, because density is not property of surface but of body, whose parts however that light does not penetrate.

In this difficulty two things are involved. First and principal is, how in reflected action one like acts on another like, and more intends it, e.g. light as two reflected acts on light as two direct, and concerning this we will treat in the following article, where we will dissolve all difficulties brought. Second is, whether in that reflected action the same acts on itself, at least per accidens and reflection being supposed. And to this we say in the present, that also in reflected action, one part acts on another, not the same on itself; for when that light is emitted from luminous, it is certain that light received in one part, and inhering that does not pass into another, for one accident does not migrate from subject, but produces another light, and multiplies that from one part to another. Hence when that light touches opaque body and there inheres, and on account of opacity does not pass further, that light acts reflecting on medium, and so never acts on itself, but on distinct part, since it produces more intense quality in the medium itself, but medium is distinct part from opaque body whence reflection happens. But how with contrary resisting, and illumination reflecting, more intense light is generated, and from what cause that greater intensification comes, pertains to the following article.

On intensification of medium through reflection of quality.

It happens sometimes that quality emitted through some medium, some obstacle being found more strongly alters the medium itself, just as rays of the sun sometimes emitted are reflected, and heat the medium itself; on account of which this last region of air is hotter than the second, where clouds condense, because reflection of rays does not arrive there. And it is doubtful from what cause that greater intensification happens, if indeed both direct rays, and reflected are of the same intensification, and therefore either like will act on like, or the same on itself. And not only through that reflection is heat which is contained only virtually in light made more intense, but also light itself is more intensified, just as we see, that light of candle if opaque body is placed behind it more intensely illuminates the medium itself, because from opaque light rebounds to medium. But we suppose in that reflection these qualities are truly intensified, whether heat, or light, because continuous experience testifies to this, since we see not only the opaque body itself, whence reflection happens, but also the medium itself is rendered clearer or hotter as is clear, because if in the medium itself writing is placed it is more easily read, and better seen, therefore it is a sign that light itself is intensified in medium, and so it cannot be recurred to greater density, because air itself is not denser in reflection of rays, than in direct emission. But to say that that light is not intensified, but that more lights numerically distinct are placed in the same subject, just as when more candles are lit in some place, this is impossible, because two numerically distinct accidents are not in the same subject, as we will show in q. 9, which if they were posited, they would be united into one, just as two waters become one water, when they are conjoined, but more candles illuminate some place more, because each touches a diverse part, in which was weaker light, and so they illuminate more than if there were only one candle, and therefore it is not similar. Wherefore it remains to inquire from what cause that greater intensification of light in the same part of medium comes, for neither can it be reduced to density alone of opaque body whence reflection happens; both because opaque density does not import greater light, nor can it intend that which it receives, since it is quality of diverse nature; and because light does not pass the first surface of opaque body, otherwise if it passed, that through which it passes would be transparent, and not opaque, but if it is received in surface alone, there is not density there, by reason of which light itself is more congregated, because density is not property of surface but of body, whose parts however that light does not penetrate.

In this difficulty two things are involved. First and principal is, how in reflected action one like acts on another like, and more intends it, e.g. light as two reflected acts on light as two direct, and concerning this we will treat in the following article, where we will dissolve all difficulties brought. Second is, whether in that reflected action the same acts on itself, at least per accidens and reflection being supposed. And to this we say in the present, that also in reflected action, one part acts on another, not the same on itself; for when that light is emitted from luminous, it is certain that light received in one part, and inhering that does not pass into another, for one accident does not migrate from subject, but produces another light, and multiplies that from one part to another. Hence when that light touches opaque body and there inheres, and on account of opacity does not pass further, that light acts reflecting on medium, and so never acts on itself, but on distinct part, since it produces more intense quality in the medium itself, but medium is distinct part from opaque body whence reflection happens. But how with contrary resisting, and illumination reflecting, more intense light is generated, and from what cause that greater intensification comes, pertains to the following article.

ARTICLE II.
Whether like can act on its like?

Having shown that the same cannot act on itself, it remains to see whether it can act on what is like it, which is as it were another self. It must be supposed that something can be like or unlike another in three ways: first, in the very species of quality, e.g. that both have or do not have heat; second, as to degrees, as that both are of the same degree of heat, e.g. four, or two; third, as to conditions of acting or being acted upon, as that they are of the same rarity or density, shape or situation, and other conditions which can in some way contribute to acting or being acted upon. We inquire therefore, whether when agent and patient have this likeness, whether all these three or some of them, the agent can act on the patient: And we speak of action when it begins not when it is consummated, for at the end of action agent and patient ought rather to be alike since action tends to this, that it make the patient like itself. Nor is there difficulty concerning equivocal agents, which are manifestly unlike not only the patient, but also the effects, but we speak of univocal agents, in which although effects are like, and therefore at the consummation of action the patient also ought to be like the agent, nevertheless from the beginning it ought to be unlike, that it be brought to this likeness.

I SAY THEREFORE FIRST: When agent and patient are alike in that triple mode of likeness, action cannot be given, and so formally speaking like cannot act on like, but ought to be in some way unlike from the beginning. This is the common sense of the Philosopher and is handed down by Aristotle in this first book, ch. 7, and there by St. Thomas lect. 19, and in many other places. And the reason is manifest, because each thing is acted upon insofar as it is in potency, and acts insofar as it is in act, therefore the patient as patient ought not to be altogether like the agent, because if it were like both ought to be in act, or both in potency, and so one would not ground action, and the other passion. It is confirmed, for the agent, if it truly acts, it is necessary that it posit something anew, which was not before, for where nothing happens anew, nothing happens, but it has been done, and only insofar as it was before, therefore that something happen anew it is necessary that now be, what was not before, and consequently that the patient be unlike the agent itself in the beginning of action, as not having in the beginning, what afterwards in the end. And on this is founded the common saying, that the agent intends to make the patient like itself, and that action proceeds from victory of agent over patient, for all these require dissimilitude between agent and patient from the beginning of action.

You will say: Between like things there is less resistance, therefore action is easier. Likewise, like things more easily conserve their power just as two hands warm themselves, and conserve heat, although they are hot waters, therefore like acts on like at least, when by acting they conserve themselves. It is responded that between two like things there is less positive resistance, but more negative, because there is incapacity of receiving new terminus, unless there be some dissimilitude in the recipient, otherwise it would already have it, but does not receive anew, and therefore action is not easier when there is so much likeness, that nothing can happen anew in the subject. To the second it is said, that conservation of heat in hands does not happen by intending, and increasing heat itself, nor by producing the same, but by defending from contraries: but if one hand produced heat in the other or intended it, it would suppose in the other, either that there is not heat, or that there is not so much.

I SAY SECONDLY: If the agent be like the patient in species, but unlike in degree, and required conditions, it can act on the patient. The conclusion is certain and commonly admitted, and is clear from experience itself, for excellent hot can act on remiss hot, and intend it, and make it like itself, and nevertheless it is clear that it already had the species of heat.

The whole difficulty is reduced to this, whether like can act on like both in species, and in degree, provided it be unlike on the part of conditions, say because it is more dense, or rare, since experience seems to show, that heat in dense matter, as ignited iron, or coal produces more vehement heat, than flame in straw, and not because it has more intense heat since flame has heat as eight, since it is fire, therefore because it has denser matter.

In this difficulty some think that density of matter contributes to intensity of effect, so that power or activity follows multitude of form in matter, not however intensity of form as M. Soto thinks Physics II q. 4 ad 5, Toledo, Niphus, and others. On the contrary however others think, that activity of form is taken only according to intensity, and degrees, not according to density, or rarity, and so hot as four cannot act, however dense, on another hot as four more rare, and so agent and patient will be called perfectly alike, when they are assimilated in species and degree of quality, even if they are unlike in density, and rarity, and other conditions. Thus M. Bannez ch. 9 On Generation q. 2. The Carmelites disp. 8, q. 2, Conimbricenses, Suarez, Rubio, and many others whom they cite. Whose foundation is, that formal reason of activity and power is taken from form and from act, for each thing acts insofar as it is in act, but it is in act through form which removes potentiality, therefore as long as it does not grow in this actuality, the formal reason of acting does not grow, nor activity; but density, and rarity do not pertain to form of heat, e.g. or of cold, but to another quality which arises from constriction, or amplification of parts of matter, therefore by force of that there is not greater activity, nor any dissimilitude as to formal reason of heat with respect to patient having equal degree of heat. And so density, and rarity will pertain only to greater extension of quality, not to greater intension of quality, and so will conduce to some extensive effects, as that the agent act more swiftly, and quickly and extend itself to greater sphere.

NEVERTHELESS I SAY THIRDLY: Density and rarity, and other similar conditions required for acting, do not increase activity, and power of agent formally and directly, nevertheless they can conduce indirectly, and through mode of a certain disposition, that some power which was weaker be fortified, and become more intense by power of agent in medium having such disposition, which cannot be produced so intensely in medium lacking it. And so sometimes these conditions conduce, that greater and more intense activity result not indeed from themselves, but from agent, such disposition or condition of them being nevertheless presupposed, and such intension being posited, denser body will be able to operate more strongly, and intensely, not by reason of density, or other conditions, but by reason of greater intension. The first part seems sufficiently proved by the foundation of the second opinion, and it is also clear, because matter whether dense, or rare can be in potency that it be more or less hot, therefore also in density itself there can be diversity of degrees of heat let us posit therefore that there be heat as six in dense matter, I inquire in other rare matter, either there can also be six degrees of heat, or not? This second cannot be said, because there can be up to eight degrees in rare matter, since it can be inflamed, and converted into fire, therefore a fortiori it can have six; then therefore both matters, both rare, and dense are in potency to more perfect degree, namely to seven, therefore it will not be able to act, and produce heat as seven, but only as six, since it operates only by reason that it is in act, not by which it is in potency, but heat in rare matter can also produce these degrees as six, therefore they are of equal activity, since they have equal effects, namely heat as six, although one operate more slowly than the other, but they are in potency to greater degrees, therefore from precise reason of density formally, and directly it does not follow, that some heat become more intense, unless something more be added.

The second part of the conclusion is more difficult, nor do all agree in it as can be seen in P. Suarez disp. 18 Metaphysics sect. 9, Rubio tract. on reaction and passion, q. 8, Murcia disp. 4, q. 4. For in this part there are two principles admitted by some as certain, which seem to exclude all intension; first, that from greater density of body, and multitude of matter, more intense power does not happen, nor more perfect effect, although it produce the same effect more swiftly. Second, that power diffused through medium since it is more and more weakened cannot produce more intense effect in remote part, even if it find greater disposition there, e.g. greater density, or rarity, and similar: which principles Murcia admits where above following P. Suarez cited sect. 8, n. 31, but nevertheless the same Suarez afterwards sect. 9, at the end on account of argument which is deduced from reflected action, was forced to deny one of those principles, and more inclines to denying this second, and truly we think it must be denied from doctrine, which we handed down in Physics VII q. 22, art. 2, and now will explain more fully.

I think therefore both these principles must be moderated according to the opinion of St. Thomas, for in the first place, as all confess it does not repugn that power emitted from some agent have in remote things some effect which it cannot in near on account of indisposition of subject, as St. Thomas excellently hands down Physics III lect. 4, and in I, dist. 15, q. 1, art. 1 ad 6, where he says: "That of any agent having situation, action is first received in medium, than in terminus, not however is it necessary, that it be received in both in the same way, but according as disposition of both exists, just as fish which held in net stupefies hand, besides that it stupefies net, which is not capable of stupefaction." Just as therefore emitted power, although it progress further, can obtain some effect not weakened in remote distance (within its sphere however) because there it finds convenient disposition, and not before, and then that power, which by passing through medium seemed weakened, efficaciously operates convenient disposition being found, why will we not similarly say, that although in medium quality be formally weakened, because it is diffused uniformly difformly, nevertheless virtually insofar as it is, power of stronger agent retains force of effecting more intense effect, where it will have found denser matter, which is more apt, that more intense effect be produced, not on account of density itself precisely, but on account of force of heat, or diffused quality, which can be explained in divided mode, and be fortified in medium diversely disposed, even if it be more distant, because that quality never loses that it be power of stronger agent, and so that it virtually contain force of producing intense effect, where it will have found apt disposition, although in itself it be formally weakened.

And this very thing speaking in terms of density, and rarity of medium St. Thomas shows Meteorology III lect. 6, in digression on colors of rainbow where he says: "That light in medium have weaker being, than in luminous body, is sufficiently manifest, because medium which is perspicuous is rare, and light on account of rarity of medium easily passes through, and is not of much permanence in it, but in illuminated body there is density, by which luminous body, and also light is somewhat terminated, and on account of density of such body, light in it is of greater permanence. And in sign of this, light existing in medium operates more weakly, than existing in luminous or illuminated body, but weaker operation follows weaker being, because mode of operating follows mode of being." Thus St. Thomas by which last words he openly confesses that light is rendered more intense in denser body, than in rarer medium through which it passes, and consequently in more remote distance can operate more strongly, than in nearer on account of diverse disposition of recipients. Finally, that conjunction of diverse lights makes more intense light, and multiplies it, when rays concur to the same point St. Thomas openly teaches in II, dist. 13, q. 1, art. 3 ad 2, and on chapter 2 of Dionysius on divine names lect. 1, therefore in the opinion of St. Thomas it must not be denied that on account of greater conjunction of rays or multitude, and thickness of matter agent can intend its quality which in rarer medium it did not intend from defect of disposition, although that not be done formally by density, or rarity, but by agent diffusing that quality such disposition being supposed, and it will be able to do that in remote, even if it did not do in nearer part on account of defect of disposition.

And the foundation is taken from reflected action of light or heat, because when light or heat is reflected those parts nearer to the angle of reflection receive more intense and vehement light, and the denser or smoother that body from which reflection happens, the more intense light it produces, as when it is reflected from a mirror, or from gold, and this cannot be done by density itself, or opacity of body formally speaking, nor is it necessary to recur to universal cause, which is heaven, therefore it happens from the power itself of the agent insofar as it has to produce more intense effect, as instrument of its agent, where it will have found better disposition. The minor is clear, because density, or opacity are not productive powers of light, but altogether unlike it, nor is it necessary to recur to universal cause, except when particular cause altogether fails, which in the present does not fail, namely the power itself of agent diffused insofar as it is its instrument. But the major is deduced from experience itself, for from reflection of light we see air itself rendered clearer, because something is better seen or read there: we see also, from denser and smoother body, light is so intensified, that it produces and ejects other similar light up to another body, whence it is said in 1 Maccabees, ch. 6 "The sun shone upon the shields of gold, and the mountains glittered therewith." We see also heat through reverberation of rays so increase, that sometimes it generates fire, therefore that hot becomes more intense, and not only more extensive, since it also produces fire. Similarly it is clear that fire inflames distant straw, or sulphur, and not intermediate air, because it finds disposition in straw, by reason of which heat can grow up to eight, which in medium does not grow, but formally was lesser heat in more distant part since it is diffused uniformly difformly, therefore it is a sign that from quality less intense formally, more intense can be produced such or such disposition being posited, because it is virtually more intense insofar as it is power and instrument of substance, and so has force to produce whole intensification up to ultimate disposition, if it will have found apt subject, and when it finds that in distant it will produce that there.

To these Authors truly respond. Some deny that in reflection of light there is more intense light, but that sight sees more clearly, because it is moved by dense body itself from which reflection happens, but light only becomes greater extensively. But it stands against, because body itself from which reflection happens cannot move more clearly, or better, except by reason of greater light, which is reason of moving, therefore if it moves more intensely and clearly, light is also more intense. Others say, that in reflection of light there are given as it were two luminous things, because that from which reflection happens again through another line emits light and illuminates, and just as when two luminous things are given, e.g. two candles in diverse parts there is greater light intensively not extensively; so when reflection happens from opaque body, intensification of greater light happens, because it is emitted through diverse line, not that opaque body is efficient of that light, since rather opacity is contrary to light, but because that luminous breaking rays there, becomes as if double in power not in entity. But against, because that virtual generation of luminous (even given that that emission happens through diverse line reflected) cannot be understood, unless new and greater intensification is posited in body itself whence reflection happens, for when two luminous things are placed in diverse parts of space, therefore greater light happens, because in that part where second luminous is placed, light was more remiss, and therefore can be intended there by more intense luminous, and so in whole space more intense light is seen, therefore if it happens in the same way in reflection of light, it is necessary that more intense light be applied to those parts where it was lesser, that medium be seen moved more clearly and brightly. This therefore is what we inquire, whence that greater intensification of luminous in reflection is taken.

Others say there is greater light only extensively, but it is seen greater intensively on account of medium illuminated from every part reflection being posited which before was not. Which is explained thus, because this air is full of small corpuscles such as we see at rays of sun, but these bodies from direct emission of light are irradiated also from one part, but when reflection happens they are irradiated also from opposite, and therefore medium is seen more clearly, and more luminous, because those corpuscles are more illuminated, which is that light to be greater extensively, that is, according to diverse parts, not intensively. But against, both because where there is no mixture of these corpuscles as in coldest regions, where these exhalations, and corpuscles, either are not elevated or are consumed, nevertheless there from reflection of mirror, or other smooth body greater light happens; and in celestial bodies, which are without these atoms, and nevertheless when light of sun falls on starred part, greater light is reverberated, than in diaphanous part, as is clear in moon, and in stars, therefore reflection of light even without those corpuscles has more intense effect; and finally, because when mirror or gold receives in itself rays of sun, not only does it more illuminate medium, but also opposite body as we see in mirror, and Sacred Scripture says of golden shields, from which mountains shone, but that splendor in mountains could not be made greater from corpuscles illuminated by reflected light, because reflected light illuminated those corpuscles from contrary part, and averse to mountains themselves, therefore that greater ejection of light, does not happen in this way through illumination of atoms.

Finally, others say that through reflection not only medium itself is illuminated more intensely, but also luminous itself, from which directly light was emitted unless it be supremely intense like sun, but if it does not have supreme light, as lamp, it will be able to be perfected by light itself through reflection. But this besides that it does not explain how greater intensification of light happens in air from reflection of solar light, still with respect to lamp suffers same difficulties, because from body whence reflection happens, light of lamp cannot be made more intense, unless it pass through medium, which is between lamp itself, and opaque body from which reflection happens, and concerning that light which passes medium up to lamp, difficulty remains to be solved, by what such intensification happens, for it cannot happen from opaque body, whence reflection happens, because density, and opacity formally do not make greater light, nor lamp, because it does not receive in itself more intense light except through medium illuminated by more intense light; and because lamp itself would intend itself, because whole light which is there proceeds from it, for from opaque formally it is only refracted, light is increased.

Wherefore it must be said, that luminous, or hot directly emitting light, or heat, and again reflecting does not intend light beyond degrees which it has in itself, for this is impossible, otherwise it would exceed proper power: nor formally is light made more intense by opaque body from which reflection happens, because density, or opacity is not formal reason of producing greater light: but it must be said that light diffused by luminous through medium is more and more weakened, because it proceeds uniformly difformly medium standing in same disposition; if however it touches smooth or dense body from which reflection can happen, that light is intensified by remiss light itself, which was in medium, not insofar as formally remiss, as is clear of itself, but insofar as it is virtually more intense, insofar as it is power of luminous itself, or agent from which it emanated, from which it has power, that where it will have found disposition of such density, or smoothness, it can explain itself in greater effect and intensification, insofar as it is power of intense agent, just as diffused from fire in intermediate air, because it is humid does not produce flame, and in sulphur, or straw somewhat distant produces it, because although there heat is formally more remiss, than in air nearer to fire, it is nevertheless virtually more intense insofar as it operates as power of fire generating another fire, where it will have found able matter, and not impeded.

Objections are solved.

You will object first: Because light touching opaque body only touches its surface, otherwise if it passed beyond that, beyond that it would not be opaque, but diaphanous, but in surface density is not given, because this seeks parts more united, therefore if light does not enter parts, it is not received there more intensely by reason of density, therefore from it more intense light cannot happen more, than from middle air which is rare.

Secondly: Because quality is diffused through space uniformly difformly, therefore it is not only weakened in itself formally, but also as it is power of agent, and so also virtually it cannot operate more intensely, because also as it is power of agent, it is remitted: hence we also see, that heat of fire, if it be much removed, does not produce fire, even if denser body, and more dry be placed there, and light which is very weakened does not grow through reflection, therefore that virtual intensification is lost.

Thirdly: Because otherwise the same would happen in antiperistasis, which nevertheless we denied above, for it could be said, that some hot through antiperistasis becomes hotter, because that heat virtually can be more intense, although not formally, so it can act more intensely, even if it proceed from less intense heat. Why therefore in antiperistasis do we say greater intensification happens from heaven, but in reflected action it happens from direct agent?

Fourthly: Speaking generally where body is denser, there is more of matter, therefore there is also more of form, because all those parts have form, but where there is much of form there is much of actuality and consequently of activity, therefore more intense action is taken from multitude of form, and density of matter. Experience also supports, because we see glowing iron does not have heat as eight, otherwise it would have form of fire, and not of iron which is false, since it returns to accidents of iron left to its nature, and nevertheless action of glowing iron is more vehement, than of flame, therefore by reason of density of matter, the same heat can operate more intensely.

To the first, there are not lacking those who deny that light is received in surface alone, and consequently deny that perfectly opaque bodies are given, but that they have something of transparency, because if light were received in surface alone there would be given surface of light separated from every divisible part, but it repugns that indivisible be separated from parts. However it does not appear why we should deny perfectly opaque bodies, just as perfectly transparent bodies are given, but if there is capacity, and potency with respect to one perfect contrary also of the other, but transparency, and opacity are contraries. But in perfectly opaque, it is certain that in surface alone light is received, and not in depth of parts, nor on account of this will indivisible separated be given, because quality does not have indivisible of species through itself, but through surface of quantity, but this is not separated from parts; but it is inconvenient, that naturally indivisible be separated from parts, because it is their terminus; but that quality be subjected in surface conjoined to parts is no inconvenience, because such quality can have its divisibility in nature of quality, and intension, although in nature of extension of quality it have only superficial.

Whatever nevertheless happens concerning this, to the argument we respond, that if light be received in body not only opaque, but also smooth, there is not difficulty there, because smooth body has something of transparency, and so light enters into deeper parts, and on account of multitude of parts, and density rays are doubled, and power of agent grows supposed such disposition. But if body be in no way smooth, but totally opaque, so that light be received in surface alone we say, that although there more of light is not received, nevertheless on account of density of matter, and opacity more is resisted to it lest it be further directly generated, and multiplied, and from such resistance light recedes into opposite part, and so is doubled, and multiplied, although not in surface of opaque body, nevertheless from that into middle air happens explanation of new effect, and light, not that light similar to that, which had been produced through direct action in middle air, is posited, but that light itself receding from opaque surface and conjoined with directly produced light, by that doubling and reflection is disposed, that it operate more intensely, insofar as it is power of luminous, having in itself more intense light virtually, than was diffused in that medium, and so operates as more intense virtually, not formally. Sign of which is, because that light thus reflected never arrives at greater intensification than is light of luminous itself, whence it was first directly originated.

To the second it is responded that quality is diffused uniformly difformly by losing, or diminishing formal intensification, but virtual is not diminished in the same way, which consists in this, that that very quality although diminished and remiss nevertheless insofar as it proceeds from such agent from which it first and originally emanated, so is its power, and operates in force of that, from which it first emanated if it finds convenient disposition, but where it does not find convenient disposition, which makes it explain itself further, quality itself is formally diminished on account of disposition of patient not able to multiply quality in the same way. But that sometimes quality is so attenuated, that it cannot even as instrument, and power of agent produce fuller effect, this is therefore, because some proportion is required in quality, even that it can be excited into greater effect as power and instrument of agent: nevertheless it can be so attenuated and oppressed by way of corruption, that it cannot further act as power of agent just as also finally it loses being, for this is deduced a posteriori from other effects, for although light can excite heat in disposed subject, nevertheless it can be so attenuated, that also in no disposition can it excite heat; similarly therefore it will be able to be so attenuated, that it not be strong even through reflection to be intended: but when it can be intended, this happens in power of principal agent itself speaking per se, because that quality thus diffused, is not only effect having formally so much or so much intensification, but also is power, and instrument of agent, which as long as it is in proportionate measure, can be explained in so much intensification, as agent has, if patient permits.

To the third it is responded that there is diverse reason in antiperistasis, because sometimes it happens through intensification of extraneous quality, and not having root in subject itself, whence action begins, e.g. when water becomes hotter in winter placed within earth, or exhalation in cloud is ignited through antiperistasis, and then either that extraneous quality through antiperistasis does not grow beyond first power by which it was introduced, as e.g. if hot exhalations, which rendered water hot in winter, had intensification as four, and from surrounding cold are in some way remitted but not altogether extinguished, then if heat grows through antiperistasis in medium, only up to degrees as four will it be able to proceed from that power first impressed, which had heat as four as from cause per se, and in this case we philosophize in the same way as in reflected action; or that quality grows in that antiperistasis beyond those degrees as four, from which it was first originated, as when it arrives at this, that it conceive fire, and then it is necessary that that greater force be supplied by some extrinsic cause, namely by universal cause, which supplies deficiency of particular cause, for there is not another, to which recourse is had when effect happens beyond power of particular cause. But when quality is intended through antiperistasis not in extraneous subject but proper, as when water is rendered colder in summer, then we do not recur to universal cause, but water itself is cause per se of that greater intensification, as has been said concerning reflected action.

To the fourth it is responded that where there is more of density, and matter, there is more of form, and activity extensively, because more parts are participating that quality, and power, not however is there more of intensification, from force of density alone formally speaking, but it is disposition, that that concurrence being posited, and coadunation of parts participating the same quality, power of agent explain itself in greater, and more intense effect, for that coadunation of quality conduces to such greater effect is clear from St. Thomas first Meteorology lecture fourteen and other places cited above. To the argument therefore it is said, that it only proves multitude of form, or density per se conduces to extension of heat or power, but dispositively and per accidens it can also conduce to more intense effect, as has been explained.

To the experience of glowing iron, or other very dense matter, many say it produces greater heat even up to inflammation, and heat as eight, because it retains something of fire within pores of iron, for when through fire something is evacuated from iron, consequently its parts are dilated and pores are opened, and in those certain particles of fire enter; which is clear from sparks, which iron emits, and splendor or fiery redness by which it is tinged. Nor does it stand against that matter the denser it is has less of pores, and nevertheless more easily burns straw applied to it. For I say, that although denser matter has fewer pores as much as is of itself, nevertheless because it imbibes more of heat more also thinner parts are resolved and evaporated, and so pores are opened through heat, but even if fewer were opened nevertheless by this very fact that they are opened and receive fire from consortium of dense parts, which drink in heat more strongly, they effect that fire act more strongly surrounded by whole density of parts, than if it were placed in air by mode of flame. Secondly, it is said that dense matter sometimes can ignite, either as instrument of fire whose power it bears and participates, or as instrument of light, which virtually is ignitive, as when from mirrors through reflection of rays fire is kindled; and because dense matter more perfectly retains and conserves power of fire or heat, and defends from contraries, therefore even if it be distant from fire itself it can ignite, because virtually it acts as instrument or power of fire, and produces heat as eight in apt matter, which in iron, or in other it cannot, just as also sulphur distant from fire is kindled air in between not being kindled, because power of one agent operates better in one matter, than in another.

ARTICLE III.
What proportion of resistance is required between agent and patient for reaction?

It must be supposed from M. Bannez I On Generation ch. 5, q. 3, and others that resistance is threefold: negative, which is nothing other than incapacity and repugnance to receiving something; and positive twofold, one passive or material, which is indisposition of the subject or disproportion with respect to the agent and its power, as a great mass of stone is moved with difficulty on account of excess of weight to power of mover. The other positive resistance is active or in the genus of efficient cause, as one contrary resists another and expels it, as cold resists heat and vice versa. Passive resistance is also usually called formal by some; material indeed, because it holds itself on the part of the subject; but formal, because it belongs to the patient by reason of some form which it has, which renders it unable and indisposed. And so negative resistance is not surmountable by any agent, because it supposes incapacity and repugnance in the subject, as an Angel and heaven resist corruption, but passive and active resistance are surmountable more or less, as the proportion of agent to patient is greater or less, or vice versa. And St. Thomas admits this twofold resistance in IV, dist. 11, q. 1, art. 3, q. 3 ad 2, and dist. 17, q. 1, art. 5, q. 1 ad 3. And the reason is manifest, because to resist is nothing other than to retard or impede another lest it do what it can or not so easily: but where agents are contrary, since there is given battle between them, because action of one strives to destroy or diminish the other, consequently debilitation of power of one by the other is given; but debilitated power is retarded and impeded, therefore it is resisted, as when fire acts on water or vice versa. Similarly there is sometimes found such disposition on the part of some subject, which impedes the agent lest it act, or lest it explain all its power, as when heat informing water resists it, lest it return to its coldness, and that resistance is not active, because an accident does not act on its subject, therefore it is formal, and so resistance is given without action.

But if you say: For that passive resistance cannot be understood, neither before the agent acts, nor after it has acted, nor while it acts, therefore it is not given. The antecedent as to first and second part is clear, because before the agent acts it is not yet resisted, and after it has acted, resistance is already overcome or past. But as to third it is proved, because when the agent acts, it actually posits effect, otherwise it would not act, and so either it removes the whole opposite form resisting it, and then the whole form is introduced, as in instantaneous action, or it removes part or some degree, as in successive action, and then that part which is removed does not resist, but others which are not removed do not yet resist, because the agent is not yet applied to them. And it is confirmed, because it does not appear how the patient having form resists the opposite by reason of its own information, but rather by reason of action, by which it is conserved in being by first cause, and so is reduced to active resistance, for that conservation is a certain action. Secondly, because active resistance is nothing other than contrary action as it weakens power of agent, as St. Thomas teaches in cited places, therefore quality which is active has only to resist as much as to act, and it will be of the same activity and resistance, nor will one element or quality be given more active, and another more resistive against Aristotle II On Generation text 8 and IV Metaphysics ch. 1, where he posits heat and cold to be active qualities, dryness and humidity passive.

To the first, omitting long solution of others, it is responded that passive resistance happens while the agent is applied to the patient, and from it strives to elicit action, for since the agent cannot elicit action without subject, because it depends on it as on material cause, and this subject must be duly proportioned and disposed, that power can operate from it, hence it is that when the agent begins, or makes effort to elicit action from matter, if it does not find it so disposed, that it can, either absolutely or according to whole power emit action it is said to be impeded either absolutely, or as to whole explanation of power, and this to be impeded is resistance on part of patient, or on part of indisposition, and material condition required, therefore action is not impeded when it already actually acts, since it is impeded lest it act, not when it acts, hence it is one thing to resist the agent on part of matter, another to resist action, and retard or weaken it, for this happens in active resistance, in which one fights, and consequently acts against another, but in passive resistance, the agent itself is impeded from going out into action, or into so much action on account of indisposition of subject, or if that indisposition supervenes after elicited action, its conservation or continuation is impeded, and then passive resistance begins, or impediment not of eliciting, but of continuing action, whether in whole or in part. Nor is it impeded that action done not happen, but it is impeded, either lest it begin, or lest it conserve and continue action.

To the confirmation it is responded, that it is not necessary to reduce that resistance or impediment to conservative action of form, but to form itself insofar as it not only gives its information, but also causes expulsion of another with such disposition, by which expulsion of form from such subject is rendered more difficult, and so is said to impede or resist the opposite agent, by reason of that disposition disproportionate to power of agent, although it is true that action of cause conserving form in subject is required, not as formal reason of resisting, but as giving existence to that indisposition, from which resistance happens.

To the second it is responded that first qualities are not equally active, but some are more active, as heat and cold, some less active and more passive, as humidity and dryness; and this is what Aristotle said; but he did not say that humidity and dryness are more resistive; but it must be understood, that heat and cold, because they are more active, are also more resistive with active resistance; but dryness and humidity resist more with passive resistance, and therefore elements where these qualities predominate, are said to resist more actively or passively, as quality actively or passively resisting predominates in them. But when we thus compare these qualities, we speak in formal sense, and from proper merits, for that power, or active or passive resistance can be helped or weakened from required conditions, and concurring to acting or being acted upon, as from greater or lesser density, application, situation and other similar, concerning which we have already spoken above, and we will treat more fully of these qualities of elements below in question ten.

This being supposed the principal difficulty runs, what proportion is required between activity and resistance that action go out, which in other words is usually inquired, whether action always happens from proportion of victory of agent over patient, that is whether it is required, that activity be greater than resistance itself of patient, or indeed it suffices that it be equal, or even less. And given that inequality or greater activity is required, secondly there is difficulty, whether it is required, that it be determinate proportion, and superiority, or indeed any indeterminate suffices.

Concerning the first there is twofold extreme opinion, and twofold middle. First extreme holds that even from lesser activity action can be given. It is proved by example of drop hollowing stone, whose resistance is greater than activity of drop; secondly, because otherwise mutual action and reaction could not be given between agent and patient, whose opposite we will show in following article. The consequence is proved, because if agent, that it act on patient, must suppose it to be unequal, and inferior to itself, that it act on it, therefore such patient will not be able again to react on agent itself, because it is inferior to it, or if it can, some action from proportion of lesser inequality.

Second extreme opinion asserts, that every action is from proportion of greater inequality, so that everything which acts conquers patient in that in which it acts. It is founded, because by this very fact, that some agent acts on patient it posits in it some effect and impresses some form, or part of form therefore in that which it impresses it subjects patient to itself. This is clear, because such patient does not impede action to go out from agent, therefore it is subjected to it. And it is confirmed, because intent of resisting is to impede action of agent, but intent of agent to impress effect on patient, and assimilate it to itself at least in something, therefore if it acts, at least in something it consequents its intent, and if patient in that does not resist; therefore in that it remains inferior, and agent superior, and so agent insofar as it acts always conquers, and patient in that which it suffers always is subjected, although according to another reason it can be conversely.

Middle opinions are two: first distinguishes twofold genus of action, one perfect and full, by which agent totally conquers patient, and this is always from greater activity, since it totally exceeds resistance of patient and from every part other action is imperfect, and remiss which cannot conquer resistance of patient but strives, and this does not proceed from greater activity, because rather it yields to resistance of patient.

Second middle opinion distinguishes concerning passive and active resistance, and says that on patient in which there is only passive resistance, agent cannot act unless there be greater activity and it exceed resistance of patient. The reason is, because passive resistance is, which impedes agent lest it act: therefore if it acts it does not impede, and so resistance is not given, but is conquered, even if it happen violently, therefore activity exceeds resistance of patient. But if resistance be active, action can happen even from lesser proportion, because active resistance or reaction happens not only when both agents are of equal power, but also when one is exceeding, and other inferior, therefore from inferior agent there can be action. This is manifestly clear, because if hot as eight is posited, and cold as seven, not only does hot as eight act, but also cold, otherwise for reaction complete equality between agents would be required, which is absurd, for rather then action and reaction will not be given since standing equality they mutually impede, and neither acts. But the reason for this is, because when two agents are given, activity of one does not act on other, insofar as it also has activity, but as it is patient, but insofar as patient it can be inferior, although in acting it be greater, therefore between active resistances action can be given from lesser activity.

Among these opinions second and fourth differ little or nothing, because fourth concedes, that agent is always formally superior to patient. Wherefore it must be said with second opinion, that agent in that in which it acts formally speaking is superior, and has greater activity than resistance of patient, although materially something of lesser activity can act on more active, not insofar as it is more active, but insofar as in something it yields to other, and is subjected to it. And these indeed besides foundations brought, experience itself of action and reaction, concerning which in following article, openly proves it, since not always both agents are of equal power, but unequal, and nevertheless even that which is less, reacts on that which is greater.

But there is difficulty in understanding how the less active can weaken the power of the more active, since the more active acts with its whole self, and thus seems to totally impede the action of the less active. To which it is responded, that although the active acts with its whole self, nevertheless it cannot instantaneously destroy the opposite active, even if it is less, but successively, because it acts on it through motion, and since it does not consist in the indivisible, but has latitude of degrees, it ought to lose that gradually and divisibly, and thus leaves place, that even the less active act on the greater, not indeed by conquering or overcoming the whole, but some part at least lesser with respect to which, because it is lesser, it has superiority, and conquers that, although it loses more of its activity, because it is invaded by a stronger agent. Wherefore that it acts with its whole self, does not infer that it destroys the whole of opposite activity, but according to proportion of greater excess, which that whole greater has over this whole lesser, it confirms more of it, but will not so extinguish suddenly, that it does not leave something which in turn acts on that at least as to something of it, in which it is proportionate, and so as to this the agent of more intense power suffers, not however insofar as it is of more intense power, but as to something less. Nor however does it follow from this, that agent of lesser power will be able to consume activity of greater, by acting gradually on its parts, because since it is weakened by greater agent, it does not always endure in the same power, but is more and more weakened, until it is totally extinguished, before it can consume the greater active.

But you will say: From this it follows, that active resistance is not distinguished from formal or passive, because if stronger agent resists according to its activity, it resists as much as it acts, but it acts according to all parts, therefore according to its whole self it resists, and so will not be able to be overcome in anything by inferior agent. But if it is overcome in some part, it is therefore, because according to that part it does not act, but suffers, and receives action of other, therefore active resistance is not distinguished from passive of that part. It is responded that active resistance consists in this, that agent especially stronger weakens power of patient reacting on itself, and so by weakening and acting impedes, lest it act further on itself; but in that, in which such agent suffers again from lesser agent, it does not resist, but rather yields to it in some way. But passive resistance, does not happen by weakening power, but by impeding action from disproportion of disposition, lest agent act on such subject, or patient.

To first opposite foundation for first opinion it is responded that drop hollows stone, not because any drop acts by removing something from stone, but because last acts in power of preceding, as St. Thomas teaches II-II, q. 24, art. 6 ad 2, of which each does not remove, and divide some part of stone, but by moistening stone, and opposing itself to its dryness, it disposes stone, that last drop remove particle of stone, for it introduces some humidity, although very little, until by continuing something of dryness is dissolved, and hardness is softened, so that by impact itself of last falling drop some particle is separated. And similarly, when some small animals as ant by their course wear stone, or earth, they do this by impulse of feet very often multiplied, by which they divide some very minute particles of earth, or stone, for impulse is divisive, and by multiplication, they make notable separation.

To the second it is responded that inferior agent, and such can react on superior active not insofar as it is more active, but insofar as in something it remains passive, and inferior because passively it does not resist. But if you say: For that more active agent, has of opposite quality more degrees, e.g. fire has heat as eight and all degrees simultaneously resist opposite quality, namely cold, since all act, therefore it does not remain in itself passive with respect to agent of lesser activity, and so will not be able to react on that, on account of its total resistance, as one cannot move great stone, even if by some impulse one strives for that, because that stone resists with its whole self, and so neither much, nor little is moved, unless impulse affect all parts, otherwise earth would be moved by any motion against what we said in question 23 Physics therefore similarly fire, because it has heat in highest, will not be able to admit anything of cold, so that something of heat be corrupted, it is responded that although all degrees of heat operate, and resist actively, nevertheless because subject does not have other resistance than active, not of inability, and passive indisposition, and resisting activity, and weakening opposite, does not destroy whole simultaneously, but gradually, and through motion, therefore it leaves place, that it can receive in itself something of cold through reason of patient in it although much more weakly, because it is of lesser activity. And so something of heat is weakened, although little, and that which is weakened, or removed from heat, does not act, until by growing action and victory on cold, it is restored. But in gravity of stone active resistance is not found, but passive rendering subject disproportionate to mover itself and since one part cannot be moved others not being moved, because it is continuous and inanimate, therefore it is not similar.

But if you insist: Therefore water could never conquer earth, because earth in formal or passive resistance surpasses other elements, but passive resistance unless whole be removed does not receive action of agent, because subject is indisposed, it is responded that dryness of earth cannot be conquered through impulse, well however through some alteration, as drop hollowing stone, as has been said. And therefore passive resistance must be distinguished as resisting divisibly, and through degrees, which can be diminished, or intended, as in alterative qualities which have contrariety, for this resistance can be removed successively, and admit something of opposite, because gradually it is diminished, as other contrary qualities. But passive resistance of gravity, and weight does not happen divisibly, and through degrees with respect to impulse, but through mode of whole, because in inanimate continuum one part cannot be moved separately from another, and therefore unless agent impede whole and affect all parts with impulse it does not move, nor conquer passive resistance of weight in continuum.

To remaining foundations of other opinions response has been made from what has been said, for we concede foundations of second and fourth opinion, except what has been said concerning passive resistance.

As to second point proposed above, whether determinate, and aliquot proportion is required, that agent conquer resistance of patient, it is responded that it is required, so that just as substantial form cannot be received under any quantity, but determinate quantity is required according to exigency of form, so for acting upon patient determinate power is required, having some determinate excess, nor does any proportion suffice, even if it be divisible, but power can be so minimal, that it does not suffice for acting on another. It is proved by reason of St. Thomas I-II, q. 5, art. 6 ad 2, where he says: "That not all heated and illuminated things can heat and illuminate others, for thus illumination and heating would be to infinity." Which consequence is manifest, because if any power however minimal, can act, therefore power communicated, and impressed by that however minimal, again could act, and similarly again communicated by that, and since it is divisible to infinity, it could act.

You will say: That minimal power will be impeded by some contrary, and so will not act to infinity, but then only will act, when it will not find contrary, or non-resisting patient, and in this opposite opinion says, determinate excess is not required, that agent act, some however is required, whatever that be. But if some power be so diminished that it have no excess over patient, then it will not act, but this is not against opposite opinion which says that it is not required that excess be determinate, although power itself in itself ought to be determinate.

But against, for if power itself ought to be determinate that it act, therefore also excess over patient, for power not exceeding, is as if power were not, therefore same reason is of power, and of excess, for therefore power ought to be determinate that it act, lest process to infinity follow, therefore by same reason excess ought to be determinate, lest posited any excess it act, because since excess is divisible to infinity just as also power, it will be able of itself to act to infinity. But if it be impeded by another, that will be per accidens, and so terminus, and sphere of activity in limited agents will not be posited from intrinsic, and per se, but from extrinsic impeding, and per accidens. Hence in illumination through diaphanous, where there is not impediment, minimal light, e.g. of candle, will be able to illuminate up to heaven, and to infinity.

If you say: Because any excess to resistance of patient suffices, that agent be said to be able to act more, than patient to resist, therefore it suffices for action, because something of resistance of patient is removed, in that namely in which agent exceeds, therefore in that it will act. Likewise any proportion and excess constitutes majority in power, therefore it suffices for acting, because where there is greater proportion of power, action follows. It is responded to first by denying antecedent, because that excess although it be greater as if mathematically, not however physically, and as is required for acting, just as neither can natural thing be in any minimal quantity, although mathematically it be divisible to infinity. To second it is responded, that any excess constitutes majority as if mathematical, and indeterminate, not physical and powerful, such as is required that natural being be, and operate.

ARTICLE IV.

Whether every agent in acting is also acted upon?

For an agent to be acted upon in acting is nothing other than to act on some patient in such a way that the patient in turn acts on it, and thus that action by which the patient acts back on its agent is called a reaction, as if returning to its agent and using it as a patient. Hence, three conditions must concur for this action and reaction. First, that the agent and patient share in matter, that is, if the agent operates on the patient, the agent must have matter so that it can be acted upon by the action of the patient. Lacking this, the heavens act on inferior things but are not acted upon by them, because they do not have matter capable of the action of these inferior things, e.g. heating or cooling, and much less can a spirit be acted upon by a body, because it lacks its matter. The second is that the agent and patient not only be of the same matter, but that each be in potency to the form or effect of the other, e.g. the cold is in potency to heat, and the hot to cold, because they lack those forms and are contraries. But if something hot acts on something less hot to intensify it, it is not acted upon by it, because it does not lack the heat it gives, and the luminous is not acted upon by the transparent which it illuminates, because the transparent is not opposed to light. Therefore, the patient and agent must be in contrary modes for there to be action and reaction. The third condition is that the agent and patient be within the sphere of activity of each other, for outside the sphere of action, no action follows, as is self-evident.

These things being set forth, one thing in this matter is certain among all philosophers, namely that between agent and patient in which these conditions concur there is mutual action and reaction, for continuous experience approves this and reason persuades. Experience indeed, because we see a cold apple warmed by the hand, and similarly ice melted, but the hand cooled by both; the edge of a sword striking another sword is mutually blunted; and food communicates its qualities to the body, but is converted into flesh by its heat. Similarly, it is clear that mixing occurs through the mutual alteration of the things mixed, as we will say in the following question from Aristotle: but if the elements did not mutually act on each other, mixing would not occur, nor would the elements fight each other unless they mutually acted on each other. Finally, reason itself shows this, because from the fact that something is an agent by reason of its own activity, it does not lose its potency to another opposite quality, and from the fact that another is a patient, it does not lose the activity by which it can act on another, therefore if these two are duly applied, they will be able to mutually act and be acted upon, because the conditions for acting and being acted upon concur in them, namely the activity of both and the potentiality of both; and there is no impediment to mutual action, since there is no impediment to their fighting each other.

The whole difficulty consists in explaining how this mutual reaction and being acted upon can occur. For on account of certain arguments which are difficult in this matter, authors are divided. And some have said that agent and patient act mutually, but not in the same parts, but act according to one part and are acted upon according to another, which is simply not to react, but to have action and passion according to different parts: Indeed others add that they do not act and be acted upon by each other at all, but if an agent is acted upon, it is from the power of celestial bodies. Others say that agent and patient act and react even according to the same part, but not according to the same contrariety of qualities, for example, hot and cold do not act mutually by reason of these qualities, but fire acts by reason of heat in the highest degree which it has, but is acted upon not by cold contrary to heat, but by humidity insofar as it is dry.

Nevertheless, the common opinion is to be held absolutely, that where the conditions set forth above concur, even in the same parts and according to the same contrariety of qualities, there is action and reaction. This is taken from the Philosopher in On Generation I, text 14, and St. Thomas in the same place, lecture 20; and commonly interpreters on this first book of On Generation, who can be seen in the Coimbrans here chapter 9, question 3; Carmelites disputation 7, question 4. And this is clear from experiences and the foundation adduced. Nor is the difficulty avoided by saying that there is not action and reaction according to contrary qualities, but according to disparate ones, as that water acts on hot fire through humidity, for even in this way contrariety must be posited, since humid acts immediately on dry, and with dryness destroyed it destroys fire, just as therefore between humid and dry there is action and reaction, and yet there is immediate contrariety between them, why will there not also be between other immediate contraries, as between heat and cold? Similarly, action and reaction occur according to the same parts, namely those by which they touch, for where they do not touch, at least through power there is no application of agent and patient, therefore neither action and reaction which occurs by acting and being acted upon, nor yet does it follow that the same thing can act on itself according to the same part, insofar as it is in potency and in act; this, I say, does not follow, because the same thing cannot be moved by itself with respect to the same quality or form, for thus it would be in potency and in act with respect to the same thing but with respect to different things, for it acts, e.g. heat, and is acted upon by cold.

Against this resolution, however, there are some arguments which always have a difficult solution and from them the proposed opinion will be more clearly elucidated; they are reduced to two classes. Some proceed to prove that there cannot be action and reaction according to the same part, but according to different parts. Others indeed to prove that there cannot be according to the same contrariety of qualities.

From the first heading it is argued: Because if contraries acted mutually, the same subject could be moved by two contrary motions according to the same part, for example, be cooled and heated; for let us suppose that fire diffuses its heat through air, and water diffuses its cold through the same air, and by means of powers thus diffused they act on and are acted upon by each other, therefore that middle air is simultaneously cooled and heated, which is to be moved by contrary motions, which if they are in intense degrees are incompossible, hence between intense contrary agents there cannot be action and reaction through any medium. This is confirmed, because if a hot agent acts on something cold, and is acted upon by it, it follows that the last part of that hot agent is cooled by the cold patient, and thus remains less hot than the other parts of such an agent, therefore the other parts which are hotter will act on that less hot or cooled part, for one part of the same continuous thing can act on another, provided it is not of the same likeness and actuality, therefore simultaneously the same part will be heated by the other parts of such a continuous thing, and cooled by the cold agent by which it is acted upon.

Various responses are usually given to this argument. Some say that there cannot be action and reaction unless agent and patient are joined, but not through a medium, to avoid the difficulty of the argument. But this is false in itself, and does not avoid the inconvenience. It is false, because action and reaction occur whenever the patient is within the sphere of the agent, as we said in the third condition, and thus it is not required that they be immediate, but it suffices that they be within the sphere. The inconvenience is not avoided, because if the power of both is diffused through the air, they will eventually come to some part or point where they immediately touch, therefore there the same difficulty will arise how that part is moved by two contrary motions. The difficulty touched on in the confirmation will also arise, when both agents touch each other, and the last part touching is moved by the contrary, and can be moved by parts of the same agent. Others say that the medium is moved by both contrary agents, but in different parts of the medium, and not along the same line, for those different agents touch different parts of the medium, and through them diffuse their power, and thus the medium is moved by contrary motion in different parts; but when those powers thus diffused come to be joined together, then the parts of the medium act on each other reducing themselves to some temperament, until the stronger agent conquers, and reduces the whole medium to itself. Others add that when those powers thus diffused have come to one point or terminus (for before they arrive the same parts are not moved by those contrary motions, but different ones), then that part or terminus is not moved by two contrary motions, because when those two contraries fight between themselves, one resists and the other acts, hence it is moved only by one contrary, but resists through the other whose power it has received in itself, and strives to expel the other, lest it receive it.

However, neither solution solves the point of difficulty. And we suppose from what has been said above, that action and reaction is not saved if it occurs through different lines and parts such that they are never joined, neither immediately nor mediately through their power, for this is not to act on each other, but for one part to act, another to be acted upon, which is the same as to be disparately related, or like different supposits, of which one acts, the other is acted upon. But speaking of agents which touch each other, and one is applied to the other along the same line or part, then the first solution does not hold, because although during all that time when that power is diffused through different parts, the same part is not moved by contrary motions, yet when afterwards they are mixed, and in some medium or point are tempered and modified, there mutual action must be, for temperament does not occur except through mutual action, and the argument about contrary motions in that part will run. But the second solution falls, because when those diffused powers come to the same point, and reduce themselves to temperament, they do this because they mutually weaken each other, and fight among themselves, therefore this resistance is not passive, but active, since it occurs through active powers, therefore there is a double contrary motion, of which one resists the other by weakening and acting, therefore in that part where this fight and active resistance occurs, there is that contrary motion.

Therefore since the whole difference between agents which immediately touch each other, and which act through a medium consists in this, that when they are joined, there is mutual contact of those two agents, and consequently there is a double surface, because those which touch do not meet in the same surface, but if they touch, they are contiguous, and consequently require several surfaces which are simultaneous, then in these surfaces it is not inconvenient that one be acted upon by another, and simultaneously one act on another; for one suffers, for example, heat and another acts, for example, cold. But when powers and opposite qualities are diffused through a medium, and come to one surface on which they exercise their different motions, which since they are diffused through the same medium or continuum, and in the continuum itself there are not two immediate surfaces, as when two agents touch, it is necessary that they be joined and operate on each other in one; and then we said that that surface in which those powers are joined is not moved by intense contrary motions but by remiss ones, because they are tempered and modified, and in this there is no inconvenience, but only lest the same mobile be moved by intense contrary motions; but to be moved by a double contrary motion in remiss degrees, or by one intense and one remiss is not repugnant, as we said in Physics question 19, article 5, which is so because qualities in remiss degrees are compatible with each other, therefore also actions: but if one degree is intense, provided it is not in the highest degree, it is compatible with some remiss degree of the opposite, therefore it can well be that the same surface is moved by that double motion of heat and cold; if indeed both are tempered and mitigated, it will be moved by both remiss motions: but if one remains intense, but the other remiss, it will also be moved by both, although only the intense motion is sensed, because it predominates; and in sum, if the subject is capable of two contrary qualities in remiss degrees, or of one in a remiss degree and another in an intense degree, it will not be repugnant to be moved by such a double contrary motion, and to be reduced to mediocrity, until one conquers and totally destroys the other, about which we will say more below in question 10, article 2.

But you will object: Because when two powers in intense degrees are joined, one single action and one motion cannot come from both, because they are different agents, therefore neither one effect or quality, e.g. tepidity, therefore two qualities will come out, namely heat and cold, and thus that surface or part will be moved by a double contrary motion.

It is answered that those opposite qualities are not united per se to make one effect, but each strives to produce its own, but because they are mutually impeded, they operate remissly, and make that quality thus tempered; for they are not impeded from operating altogether, but from operating intensely, therefore they can be reduced to operating remissly, and the subject can be moved by a double contrary remiss motion, until one of those qualities prevails and consumes the other. But if they remained altogether equal, such that neither was remitted, there would be no action because of the equal impediment of both.

To the confirmation of the principal argument it is answered that that last part of water which is heated by fire is not cooled by its immediate parts effectively, nor by emanation from itself because of the contrary impediment of the heating fire; and thus whether it is a native quality emanating, or extraneous, while it is occupied by the intensely acting contrary, it cannot simultaneously receive the contrary quality.

But you will say: How is that last part of water impeded from being cooled, and receiving its own proper quality and not impeded from cooling or reacting on the contrary, since water by means of that last part, which is touched by fire reacts on fire, for it is the part immediate to it, therefore it ought to have similar coldness by which it reacts on fire itself, therefore from immediate parts, or by emanation of nature from itself. It is answered that that last part is impeded from being cooled, that is, from having cold added to it because of the contrary agent, e.g. fire, which is stronger in impeding the contrary motion of cooling, and the reception of cold. However, that last part is not impeded from cooling, when it is first applied to fire, because then its coldness which it had is not yet totally destroyed, and thus until it is destroyed by fire, it reacts through it and in some way cools, until with heat itself overcoming it is totally conquered, and then it will also be impeded, or cease to cool, unless cold itself is restored by some cause overcoming the strength of fire, and then in turn it will impede fire, lest it be heated by it, and thus it will never be moved by intense contrary motions.

Secondly, it is argued: Because several inconveniences follow from the fact that mutual action and reaction are given. First, because nothing could act according to its whole intensity, e.g. fire could not produce heat of intensity 8 in air or water, because while it acts, it is acted upon, and through this passion something is diminished, otherwise nothing would be acted upon, therefore it produces less, and not the same quality. But if it is said that this diminution is overcome by the natural power of the agent, and thus it finally produces an intense quality, against this is that thus the agent itself would first act on the part of itself which is acted upon, as being closer, than on the contrary agent, and thus while it strives to expel the reaction of that last part, either it does not act on the contrary, or that part will be moved by contrary motions, because it is continually acted upon by the contrary, and reduced to its former power by itself. The second inconvenience is that the same subject would remain superior and inferior with respect to the same thing, since the same quality which is moved by being acted upon, is intensified by acting, because action is only from a proportion of greater inequality. Third, in the case where a subject was endowed with heat of 4 and cold of 4, if water and fire acted on such a subject, each would produce something new, because it would act and react, and would not produce, because neither could exceed that degree of 4, because of heat and cold there cannot be had more than 8 degrees, but then there are 8 by having 4 from one and 4 from the other. Fourth, the elements could not act on each other except through mixture, for when something acts and is acted upon by another, that part which is acted upon is tempered and modified by what it receives and by what it has, therefore mixture occurs, and thus action and reaction would be the same as mixture. Finally, because fire, for example, not only resists contrary water through heat, but also through its substance by which that heat is conserved, therefore it has greater resistance than water has activity, since it resists through heat and through substance, therefore water will not be able to act on fire through cold, because the resistance of the patient is greater than the power or activity of the agent, which is only the quality of cold, for substance does not act except through accidents, but it receives by reason of substance, and thus resists by reason of itself.

To the first inconvenience the antecedent is denied. To the proof it is said that as long as the agent is acted upon, and its power is somehow tempered, it will not be able to act according to its whole intensity, because it is modified by the reagent, but afterwards with this impediment removed, and the power growing either from native emanation or from an extrinsic cause, then it will act according to its whole intensity. And to the instance to the contrary it is answered that that last part which was acted upon is strengthened and conquers through being reduced to its whole power by an intrinsic cause, if it is a native power through emanation, or by an extrinsic strengthening cause, if it is an extraneous power, and then that part simultaneously suffers intensely from one and remissly from the other; for the contrary agent acts more remissly when that power of its patient is strengthened either by native emanation or by extrinsic power. Nor is it repugnant, as we said above, for the same thing to be moved by two contrary motions, one remiss and the other intense, or both remiss, because then they do not expel each other.

To the second inconvenience it is denied that the same thing is superior and inferior with respect to the same thing at the same time, but when it is acted upon the quality is diminished, but when it is strengthened so as to operate more intensely, it becomes greater, and then it does not remain less, because it conquers the opposite. Hence it is never verified that the same thing is formally superior and inferior.

To the third it is denied that this inconvenience follows, because that agent which acts on a subject hot as 4 and cold as 4, either is of stronger power so that it can conquer some degree of heat, or not. If not, then it will do nothing, but will conserve heat in that degree of 4, nor will it do anything new, because there is nothing from which to do it. But if it is of stronger power, it will conquer more of cold than it suffers from it, and in that more which it does, it will intensify heat and remit cold not beyond the degree of 8, but proportionally as if it increases heat to 5, it will remit cold to 3 and so for others.

To the fourth it is answered that in every action and reaction some mixture is given, at least imperfect, that is, of the qualities themselves without corruption of substance, especially at the beginning, but afterwards either one of the agents totally conquers, and thus the mixture is dissolved, even as to qualities; or they remain in some temperament; which if it is such that it changes substance it will be perfect mixture, if not it will be imperfect, only as to qualities.

To the last it is answered that fire in active resistance is equaled to water, because both act through qualities formally, and through substance radically; but as to passive resistance, although fire resists the passive reception of cold through substance and dryness, nevertheless that passive resistance is not as great in fire as is the activity of cold for acting, because in passive resistance fire does not excel much as in active. But if there is some patient which resists passively more than the agent acts actively, then its action will be more retarded until it conquers that resistance.

Finally it is argued: Because if there are two unequal agents, one will not react on the other, because action does not occur from a proportion of lesser equality, and thus the lesser will not react; but if they are of equal power, they will mutually impede each other, therefore reaction and being acted upon will never be given, because action is always from a proportion of greater inequality; and Aristotle says of fire in On the Parts of Animals II, ch. 2, that it is never cold, therefore at least fire will not be acted upon. And it is confirmed, because in other motions, as local and of augmentation it is not necessary for action and reaction to be given, for if a hand moves a stone it is not necessary for it to be moved by it, and what grows in augmentation does not decrease on the other part through diminution, therefore neither will it be the same in the motion of alteration.

It is answered that an agent acting on an equal reacts on a stronger agent, not insofar as it is an agent, but as it exists in potency with respect to the contrary quality, and with respect to such potency that remiss agent is stronger in activity. But nevertheless because in acting, simply the other agent is stronger, therefore the agent of lesser activity does not act simply on the other, but acts remissly and imperfectly and in being corrupted, since it is weakened and destroyed by the stronger agent, and such a mode of acting can be from lesser activity. But if you say: How can cold as 4 diminish from hot as 8 the eighth degree itself, which is more perfect than the others, since it reduces hot as 8 to heat as 7, and as 6, therefore it removes the eighth degree, it is answered that although the degree as 8, or the union as 8 is more perfect than the others, nevertheless by this very fact that it is more perfect, it necessarily tolerates less of the opposite, and destroys not only what is greater; but also what is less of the opposite form, but if it tolerates something of it by this very fact it has less perfection. And thus a lesser degree is not opposed to, nor destroys a lesser opposite, but rather is compatible with it since they are simultaneously in remiss degrees, but it is opposed to the more perfect, as it is more perfect, and excludes the imperfect.

But to what Aristotle says about fire, that it is not called cold, this is understood as to denomination, just as water is called hot even denominatively, because cold can never predominate in fire, as heat in water, so that it would be denominated cold from it, because denomination is always made from the more excellent predominating, but fire can well receive something of cold, otherwise it would never be extinguished, if it did not receive the opposite disposition.

To the confirmation it is answered that in other motions there is not always given a contrary agent by which reaction occurs, for if I throw a stone, it is not necessary that the stone have motive power with respect to me, nor is it necessary that when something is augmented by acting on food, the food itself have the power of diminishing that by which it is changed. And therefore reaction does not always follow in other motions; as between contrary qualities, which act on each other by reason of active contrariety.

QUESTION VI.
ON MIXTURE.

Since mixture occurs through mutual action and reaction, mixture is very closely related to action and reaction, and thus we deal with it before rarefaction and condensation.

ARTICLE I.
What mixture is, and how it occurs.

The common and accepted definition of mixture is that mixture is the union of altered miscibles, which definition is given by the Philosopher in this book On Generation, chapter 10, and there by St. Thomas, lecture 25, and philosophers commonly agree.

To explain this definition, note two things. First, that mixture can occur in two ways: one way improperly and broadly for any conjunction of things into one, even if from these one thing is not made simply, which is rather a packing together of many things than true mixture, for it occurs through juxtaposition of minimal parts gathered into one, as when various grains are mixed, that is, simultaneously confusedly aggregated, like barley and wheat flour, or other minute grains; in the second way mixture is taken strictly and rigorously, as not only are many things aggregated through juxtaposition in one place and packing, but through true union, that is, the resulting of one thing per se; and for this a change of the extremes is required, so that each does not remain in itself. In the first way some of the ancients took mixture, as Aristotle reports and refutes in the cited place, texts 85 and 86, which however is not properly mixture, but an aggregation of many things, because any grain or any minimal part does not remain continuous with another, but contiguous and separately divided, but a mixture which is simply such ought to be of the same nature in the whole and in the part, and consequently have continuous parts, but in that mixture any minimal part preserves its species, therefore from these a mixture is not made, but an aggregate, therefore neither is there true mixture there.

Secondly it should be noted that for mixture rigorously speaking four conditions are required. The first pertains to substance. The second, to quantity. The third, to quality. The fourth, to where. The first is that mixture presupposes diverse substances from which it is made and tends to one which is to be made from them, for this is what the Philosopher says in the cited place, text 83, that it is necessary for the miscible to exist separably, for if they were not separate, it would not be necessary to make a mixture from many things. But that they tend to one is clear, because if they did not become one, it would not be mixture, but either an aggregation of many things, or simple generation of one from another, not mixture, for when an element is generated from something, there is not mixture there, because a mixture is not made, since it is not generated from many things mutually changed and united, but rather resolved into such an element. The second condition is on the part of quantity, for it is required for mixture that the miscibles be mutually divided for this, that one may enter through the parts of the other, because if it remains outside, it will indeed be able to alter or generate something from it, but not be mixed with it; hence when two liquors are mixed, we see one divide the other and permeate it, and Aristotle in the last text of this tenth chapter says that it is necessary for miscibles to be terminable and passive, but this as St. Thomas says is well terminable, which is well divisible into small parts, like humid bodies, which therefore are more miscible. The third condition is on the part of quality, namely that they be active and passive according to qualities, not however so that one predominates over the other, to the extent that it draws it to itself as a part, as occurs in augmentation, but it is required that from both a third temperament is made; and therefore this activity and passivity of qualities is required, because when a mixture is made from elements or from liquors, the qualities ought not to remain in all their vigor and crudity, as they are in the elements, but be tempered with each other, and thus mutual alteration is required, as the Philosopher explains in the cited place, text 89 and St. Thomas there in lecture 25. The fourth condition finally holds itself on the part of where, namely that the miscibles come together in one place, otherwise mixture will not occur, nor will one thing result, nor will mutual action and passion be given, if they are not locally applied in one place. But by what agent mixture is made, especially of elements, we will say in responding to the arguments.

These things being posited, I SAY FIRST: Mixture as explained by us is in fact given. Thus Aristotle against some ancients, who denied mixture, as is clear in text 83, where St. Thomas can be seen and it is clear both from experience, because we see many things mixed with each other, that is, from many things come together into one third thing, as from various liquors in which the simple things are not entirely extinguished as to power, although the substantial forms do not remain, which is a most manifest sign of mixture, for in generation which is not mixture, one thing is entirely extinguished as to form and power, as if fire is made from earth nothing of earth remains, if a drop of wine falls into a river, nothing of wine remains, and therefore that is not mixture, but simple generation, therefore for there to be mixture something ought to remain; and also because we see some bodies are not simple, like the elements, but mixed or composite, since in them is found something of all the elements, namely the elemental qualities, therefore it is necessary that the generation of such bodies be mixture not simple generation; and finally, because in bodies there is given mutual action and reaction, as was shown in the preceding question, therefore it is necessary that mixture be given, since from that mutual reaction the qualities themselves are mixed and tempered, therefore there can be such a great corruption, that those bodies do not remain in their state, nor with due dispositions, and consequently that some third thing is made from them, which is a mixture. But if you inquire whether all four elements concur to the composition of a mixture, we will say more about this in question 11, for there are not lacking those who deny this only, who think that fire cannot descend to the place of the mixture, that is, to earth, where mixtures are made, because otherwise fire would be moved violently. But nevertheless this foundation is weak, both because in earth true fire is given, which is not a mixture, but an elemental body, although not so pure as in its sphere, therefore from it mixtures can be generated; and because it is not repugnant for some exhalation to be inflamed above by elemental fire, and to fall into other exhalations, or even to earth, like lightning, which although they are ignited exhalations, nevertheless carry fire with them, since we see them burn and inflame many things therefore it is not to be denied that fire can descend, and virtually remain in mixtures generated from such inflammation, and be communicated to others.

I SAY SECONDLY: Aristotle's definition of mixture is excellent. All philosophers commonly accept it, although there has not been lacking someone who has criticized it as faulty, because it is given through something equally unknown, namely through miscible for it is as unknown what miscible is, as what mixture is; and because a circle is committed in it, because mixture is defined through miscible, and miscible through mixture. But our conclusion is manifest, because through this definition the nature of mixture is explained, as it is distinguished from simple generation which is simply made from one thing which is corrupted, as when fire is generated from wood. But indeed in mixture there is given generation from the tempering and gathering of some things which are divided among themselves, hence it is necessary that it occur through the mode of a union or gathering tempering and joining many divided things into one third thing. Hence this definition presupposes the definition of substantial generation in common, namely that it is a change from substantial non-being to substantial being in matter, but it explains that in which generative mixture differs from simple generation not mixing, nor gathering some things, from which one third thing is formed. And therefore St. Thomas in this first book On Generation lecture 25, at the end explaining this definition of Aristotle says: "That mixture is the union of altered miscibles corrupted according to forms." And so "union" is the same as congregative or factive action of one from many substantially, and thus it does not signify the union of matter with form which is common to all generation, but from many which are corrupted a tempering and gathering into one, and therefore it is required that the miscibles be altered, not by any alteration, but by one corrupting them, and reducing them to one third thing.

Thus therefore, in this definition three things essentially required for mixture are explained, namely on the part of the terminus a quo, from which things it is made; on the part of the terminus ad quem, what is made; on the part of the action, how it is made, which is to fully explain mixture. On the part of the terminus a quo, that it is not made from one thing only which is totally corrupted, but from many miscibles, that is, distinct in themselves, but gatherable into one. "Of altered" is added, for two reasons. First, that it may be understood that mixture should first and per se occur in qualities, which by alteration itself are confused, and come together into one middle power or quality, for this ought to remain in the mixture, if a true mixture is made, to distinguish from those things which are mixed without alteration only through division of minimal parts simultaneously gathered. Second, that such an alteration may be signified which is corruptive of the miscibles, as we noted from St. Thomas, otherwise one thing would not be made from the miscibles themselves. On the part of the terminus ad quem it is explained, that one third thing is made from them, and not that any of them remains. On the part also of the action or mode of proceeding the union itself signifies the mixtive action, that is, which is not only unitive of form and matter, but congregative of many miscibles into one.

From which it is gathered how mixture differs from substantial generation, and how it includes it; for it differs from simple substantial generation, not from substantial generation commonly speaking, which it includes as a genus, but it adds above simple generation to occur through the mode of unitive and congregative, with qualities remaining reduced to a mean. And when the Philosopher proves that mixture differs from generation, he does not speak of generation in general, but of simple generation, which is a species of generation, and is named by the name of generation absolutely, just as disposition is said to be a species divided against habit, although nevertheless there is also given a generic disposition to habit. Nor therefore is it to be denied that a substantial form is given in a mixture, to which a tempered quality is due, for as St. Thomas teaches in Contra Gentiles IV, ch. 81: "The form of a mixture can be understood in two ways, in one way, so that by the form of the mixture is understood the substantial form of the mixed body. In another way the form of the mixture is said to be a certain quality composed and tempered from the mixture of simple qualities, which so has itself to the substantial form of the mixed body, as a simple quality has itself to the substantial form of a simple body." And thus mixture is not terminated to quality alone, but to substance, and thus it differs from alteration, because it not only presupposes it, but also is called simple, which either generates a simple body, namely an element, or which generates in a simple mode, that is, not through the gathering and tempering of many things, but by simply corrupting one thing and generating another, as if a drop of water is injected into a great quantity of wine, one third thing is not made there from miscibles, but from one thing another is made, namely from water, wine.

From which it is gathered that the Philosopher did not define mixture through something more unknown, for he first explained miscible through its conditions, then mixture through miscible. And similarly he did not commit a circle, because he did not make known miscible through mixture itself precisely, but through other conditions required for miscibles, as is clear from the text, and thus Aristotle was able to explain mixture through miscible already explained from elsewhere.

Arguments are solved.

First, it is argued: To prove that mixture is not given in nature by that argument of the ancients, because either the miscibles are corrupted for mixture, or not: if they are not corrupted, therefore they are not more mixed than before, but are only gathered into one, they do not become one; if they are corrupted, therefore mixture is not made from them, because mixture is not made from non-beings. It is confirmed, because mixture either occurs through division of parts or through penetration, this second cannot naturally be: but if the first occurs, first mixture will only be through juxtaposition of one part to another; then either the continuum is resolved into every part of itself or not. The first cannot be, because any part is divisible, and thus cannot be divided into every part of itself, so that it can no longer be divided; nor the second, there is no greater reason why it should be divided into these parts than into those.

It is answered that the miscibles are corrupted formally, but remain virtually in the mixture by reason of qualities; and mixture is made from miscibles which actually exist in the beginning, when mixture is begun, but do not exist at the end when the mixture is generated from those corrupted. To the confirmation it is answered that mixture occurs through division into minimal parts, nor yet does one only remain next to it, but acts on it, because action and reaction more easily transmute a thing thus divided and broken up into minimal parts, and thence results the form of the mixture. But when it is asked whether it is divided into every part of itself, it is answered that it is not divided into every part of itself as if mathematically, for this is impossible, since every part is always divisible, but it is resolved into minimal natural parts, in which namely the species of such a body can be conserved, that they may act on each other; sometimes also it will occur in larger parts, as the agent, by which mixture is made, more or less breaks them up, and the matter itself allows, and suffices for mutual action and reaction.

Secondly, it is argued: Mixture which occurs from elements is neither natural nor violent, therefore none. It is not violent, because thus it would not be ordained by nature for producing mixed bodies, nor would the production of a mixture be the production of a natural thing. It is not natural, because some elements must be placed outside their place, that a mixture may be made from them, as air and fire must descend to a lower place, where the mixture is made, and especially it does not appear how mixtures which occur within the sea from the concourse of air and fire can be carried out. It is confirmed, because if elements come together for mixture, it is necessary that they be moved to the place in which mixture occurs by some mover; not by themselves, because of itself each element tends to its own center, not to the place of any mixture, nor do elements intend the form of the mixture, but to generate their own as much as is of themselves, especially since an element is more imperfect than a mixture, and thus cannot from its own power intend its generation and move itself to it, nor are elements moved by another mixture, because we can speak of the first mixture, which was made from elements, and did not presuppose another prior mixture, by which elements would be moved; nor are they moved by heaven, because it is a universal and remote cause, nor can it be the immediate cause of all mixtures, as is clear in perfect animals.

It is answered that mixture is natural as ordained by nature, and terminated to the production of a natural being. Nor is it an obstacle, that violence is done to some element, because this violence holds itself on the part of the element, which is corrupted, and passes into the mixture, but not on the part of the mixture itself, which is produced; for there is no inconvenience, that in natural generation the corrupted suffers some violence, for although it is violence with respect to the corrupted, it is nevertheless natural to matter, and ordained to the good of the universe and thus mixture is simply natural, although it presupposes some violence on the part of that which is corrupted. Nor is it necessary that all elements formally enter into any place where mixture is formed, it suffices that they enter virtually, and through their qualities, as in the depths of the sea heat is found in fish for vital operations, which heat is a certain power of fire, and can be participated from heaven.

To the confirmation it is answered, that elements from their own are not moved to mixture, but well by a superior cause, e.g. by heaven, or by God, who in the beginning produced all mixtures from elements, and although some are said to be made from water or from earth, it is not because of this taken away, that all elements at least virtually concur to mixtures, since also in fish as we said heat is found, which is the power of fire, but they are said to be made from that element, which more predominates in such a mixture, concerning which St. Thomas in I, q. 71, in the body and to the first.

But to the instances confirming it is answered, that an element according to itself, and from its own is only moved to its center, and to generating its like, nevertheless from the impression of a superior cause it can act for the production of a mixture, as earth alone does not germinate herb nor produce metals, but from the impression of heaven. And when it is said, that heaven is a universal and remote cause, and cannot [act] on all mixtures, it is answered that with respect to some mixtures it is a sufficient cause as with respect to herb, and metal, and similar things, but with respect to perfect animals it is not a sufficient cause, and thus it was necessary that the first animals be produced by God, then heaven concurs with the aforesaid animals to generate.

Thirdly, it is argued, against the definition of mixture: Because union is nothing beyond relation, as we said in question 6 of the Physics, but relation does not pertain to the species of generation which is action, therefore mixture which is a species of generation is inconveniently defined through union. It is confirmed, because mixture differs from simple generation on the part of the terminus ad quem or form to which it is terminated, namely to the form of the mixture, therefore just as generation is defined, that it is a transition from privation of substantial form to substantial form in matter, so mixture which is a species of generation ought to be defined that it is a transition from privation of the form of the mixture to the form of the mixture, but not through this that it is union, for formally it is transition, because it is generation, but not union, because it is not relation.

It is answered that "union" in the definition of mixture does not signify relation itself, or the unitive mode of extremes, but is unitive and generative action in such a mode, that is, from the congregation of miscibles into one, which is tempered, and gathered from all, but is not generated from one only, and thus under the name of union is not understood union in fact, which formally imports relation between extremes coming together in unity, which they acquire through union, insofar as they communicate themselves to each other, and therefore they ought to presuppose some action and passion, by which one is communicated to another for constituting such unity, not indeed through some superadded mode as through formal reason, because that unity in which extremes come together, is not formally modal, substantial, or accidental unity, and therefore does not have for a medium, and formal reason mode, but the communication itself of extremes which occurs through their entities applied by such action, or passion; and that action thus tending to communicate is also called active union, and this is understood by the name of union in the definition of mixture, not indeed action uniting matter to form, because this is common to all generation, but by which miscibles are united, for this that corrupted among themselves they make one mixture, and therefore it stands, that they are united through mixture, although they are corrupted, because they are not united formally as component extremes, but virtually in one third thing, which results from such miscibles tempered into one.

To the confirmation it is answered, that mixture is a transition from the form of miscibles to the form of the mixture, but because it is not a simple transition, but congregative from many, it is designated by the name of union, in the way which has been said.

ARTICLE II.

How mixture occurs in liquors both of the same and of different species?

There are two kinds of miscibles, some are like liquors, some like elements: in this article we will deal with liquors, in the following with elements. Regarding the mixture of liquors, we suppose that mixture broadly taken can occur in them, which happens through the mere aggregation of parts in one place, for this is clearly evident from experience, since we see some liquors confused in themselves. The difficulty is in two points. First, whether proper mixture occurs between these liquors, which makes one third thing from the corruption of them. Second, especially when two liquors of the same species and of the same accidents are mixed, whether true and proper mixture can occur, with corruption of the miscibles, and generation of one third thing.

I SAY FIRST: Between liquors of different species having contrary qualities, true and proper mixture is given. The conclusion is sufficiently known, and is taken from St. Thomas in III, q. 77, art. 8, where he says: "That if some liquor is mixed in such a quantity, that it can be diffused through the whole wine, the whole would become mixed, but what is mixed from two things is neither of the miscibles, but both pass into a certain third composed from these, hence it would follow that the wine previously existing would not remain, but the mixed liquor would be of another species, for example if water were mixed, the species of wine would be dissolved and it would be a liquor of another species." And he teaches the same in IV, dist. 12, q. 1, a. 3, q. 6. The reason is, because between liquors having contrary qualities the conditions of true mixture concur; since on the part of quantity since they are humid they can easily be divided, as the Philosopher notes in this first book, text 89, similarly on the part of quality they have contrary quiddities, therefore they are capable of corruptive alteration, because this is founded in contrariety of qualities, and consequently they can thus be tempered, that the liquors are corrupted, and one third thing is made.

But concerning liquors of the same species, which do not have contrary qualities, and yet are mutually divided, and coupled, there is greater difficulty, for on one hand it seems that one mixture is simply made from them because one in number is made through coupling of parts, as from two waters in one vessel one water in number is made. On the other hand alteration is not given, since they do not have contrary qualities, therefore neither is altered by corruptive alteration, which is essentially required for mixture, but corruption is not given from one individual into another, because like does not act on like, but from one species into another. Also, because otherwise if mixture were made from two liquors of the same species with corruption of both, it would follow that if consecrated wine were added to other consecrated wine, there the body of Christ would cease to be, although both are consecrated. The consequence is clear, because another in number distinct from both miscibles is made, and that third thing is not consecrated, because it is made anew, therefore under it the body of Christ does not remain. Which follows a fortiori if some non-consecrated wine is mixed with consecrated, for then also one in number distinct will result, which was not subject to consecration. And thus St. Thomas openly affirms in the cited place from the third part. Which is confirmed, because as is said in the chapter Cum Marthae, on the celebration of masses, when other wine is poured into consecrated wine, this second neither passes into blood, nor is mixed with blood, therefore the decretal supposes, that mixture does not occur from liquors of the same species.

TO THIS, I SAY SECONDLY: When two liquors of the same species are joined, not having contrary qualities, then corruption does not occur nor mixture, but only continuation of one liquor to another, and in such a case St. Thomas does not say that another in number is made, or destroys the blood under the consecrated species if other wine is mixed with them. The prior part, which is common to Thomists as M. Nunno asserts in I, q. 77, art. 8, around the fourth conclusion of St. Thomas is proved, because for mixture of which we speak in the present, division of parts, and continuation of them does not suffice, that mixture may occur as the Philosopher proves in this first book, text 84 and 85, otherwise mixture would be aggregation of parts, and juxtaposition, and thus when fire generates another fire for itself, mixture would be said to occur there, although nevertheless no mixture is made. Wherefore generative mixture essentially requires alteration of miscibles, and such that it corrupts the miscibles, that it may occur; therefore where there is not alteration and corruption as to form there is not mixture, but where there is not contrariety of qualities, there cannot be corruptive alteration, because all corruption is founded in contrariety, therefore between liquors not having contrary qualities, mixture cannot occur, of which we speak in the present, which occurs from tempering, and corruption of miscibles, but only continuation of one part with another will be able to be given, as when water is mixed with water with no mixture produced, but element continued.

The second part from the same context of St. Thomas in that question 77 cited, art. 8, for he says: "That the body and blood of Christ remains in the species, as long as those species remain the same in number, because this bread and this wine is consecrated, hence if such a mixing of any liquor occurs, that it reaches to the whole consecrated wine and becomes mixed, it will be another in number, and the blood of Christ will not remain there." Which words proceed from the supposition, that mixture of liquor with liquor occurs, and a mixture is made, and thus supposing corruption, and not only continuation of both liquors. And in the solution to the 2nd he says. "That mixture having occurred the species are corrupted either in whole, or in part," therefore he supposes that corruptive mixture occurs, and consequently alteration founded in contrariety of qualities, but not only continuation of species, for of this he does not say that it suffices for this that the body of Christ cease to be there, indeed he seems to approve the opposite in IV, to Annibaldum disp. 12, single question. art. 3, to the 3rd.

I SAY THIRDLY: When liquors are of the same species, but have contrary qualities, true mixture and corruption of miscibles can be given, and in this case St. Thomas speaks that blood will not remain in the consecrated species, if another liquor of the same species is mixed, which makes it be another in number, as is clear from his words in the cited place: "If," he says, "a liquor of the same species were joined, for example if wine were mixed with wine, indeed the same species would remain, but the same wine in number would not remain, which the diversity of accidents declares, for example if one wine were white, and another red," therefore from this declaration it is gathered, that St. Thomas speaks of liquors of the same species having diverse accidents. Especially this is aided from another place in quodl. 10, art. 3, where treating the same question and impugning those who said that through any drop of liquor mixed with the species, the blood of Christ would cease to be there he says: "That addition itself does not take away the essence of dimension, but varies its termination, which indeed is varied not only through addition, but also through division, hence if such variation sufficed for this, that the body or blood of Christ would cease to be under the species, it would follow that through division of the species, it would similarly cease to be, which is clear to be false." Wherefore according to St. Thomas through addition, or continuation of liquors the substance of miscibles is not dissolved, either specific, or numeric, but through mixture it is dissolved, because it is with corruption. And from this the first part of the conclusion is proved because in liquors of the same species if opposite accidents are given, by reason of which one is more active than the other, as diverse color, or acrimony of such liquors indicates, then sufficient contrariety for corruption is given in qualities, and division of parts between the liquors themselves is also given, as we see occur, therefore whatever is required for true mixture is given, namely division, alteration, and corruption. Nor is it an obstacle that they are of the same species, because well can one individual obtain qualities opposite to another, by reason of which it acts for the corruption of the other into another third thing, in which those qualities remain tempered, since not only one individual, but also one part can act on another in the same individual, as is clear in living things, for food failing one part acts on another, and consumes it, whence the animal is rendered lean and thin, therefore similarly one individual will be able to be stronger than another, as one wine is stronger than another, and through its quality acts on it, and dissolves it, tempering in one third thing, for then like does not act on like, because they are dissimilar according to opposite qualities.

From which the answer to the reasons for doubting from the beginning is clear. For to the first it is answered, that when two liquors are entirely similar in species, and qualities, then one is not corrupted by the other, nor mixed, but continued to the preceding, and thus something distinct in number is not made, but the same in number is made greater through continuation, as an animal grows through augmentation; but if they are of diverse qualities, which can be tempered into one, then mixture occurs, and one third individual results with the miscibles corrupted. Nor is it necessary, that all corruption be from one species into another, but it can be from one individual into another, as we have already explained.

To the second it is said, that if consecrated wine is mixed with other consecrated wine, this can occur in two ways; one way when both species of wine have the same qualities, e.g. are of the same acrimony, heat, etc. another way when it has diverse qualities of which one can be mixed with the other, and tempered. In the first way it is certain that mixture does not occur, but continuation of one species to another, and thus it does not corrupt the miscibles; but these not being corrupted, blood does not cease to be, as St. Thomas argues, because even if it is divided, and many individuals are made from the species of wine, or bread, the body of Christ does not cease to be there. If it occurs in the second way, so that true mixture is made between the species themselves, then some judge it to be probable, that there the blood of Christ would cease to be, because one third individual is made with the miscibles corrupted, and consecration did not fall upon it; which St. Thomas seems to insinuate in the said question 77, and M. Nunno cited expressly holds, although he says it is not certain. Nevertheless I think the holy doctor does not speak in that case, in which two consecrated species are mixed, because although one third individual is made, because nevertheless all parts were consecrated, the whole remains consecrated by reason of the parts, just as conversely when a host is divided, and two individuals are made, each retains consecration, because although they were not consecrated as two individuals, because nevertheless they were consecrated in their principle from which they are divided and multiplied, therefore they retain consecration. But indeed if non-consecrated wine having diverse qualities is mixed with consecrated, so that it pervades and perfuses the whole, in this case another individual is made from both, and since it is not consecrated in all its parts, and in itself is another distinct in number from that which was consecrated, it is probable that blood ceases to be in that whole, and in this case St. Thomas speaks, but because it is not entirely certain, that wine is to be religiously preserved.

To the confirmation it is answered, the decretal only says, that wine added to non-consecrated species is not mixed with the blood contained within, nor perfuses or touches it, since it is not there in a connatural and extended mode: nevertheless it does not teach that it is not mixed with the species, that one third thing is made, which resulting blood ceases to be there.

ARTICLE III.
How mixture occurs between elements, and how they remain in the mixture?

Concerning the mixture of elements, there can be two difficulties. First, whether all four elements truly mix, so that the mixture is composed from them. Second, how elements are said to remain virtually, and not formally, in the mixture, and what it is to remain virtually.

Regarding the first, Aristotle discussed it in this second book, ch. 8, text 50, where he shows that all elements are in any mixture, and concur to it. And indeed that all elements can be in any mixture, or concur to it, we have already said above, showing how even fire can concur to constitute a mixture. But that in fact all elements are found in every mixture, Aristotle asserts in the cited place; which is not to be understood so that when any mixture is generated, all elements formally come together there, since this can scarcely happen, as is manifest in animals, and those things which are generated within water, but it suffices that the powers of elements, which were tempered in prior mixtures, are transfused from one mixture to another. And indeed from the fact that heaviness is found in mixtures, it is manifest that heavy elements concur in them, and not only earth but also water, because otherwise they would have dryness without any humidity, and thus could not be continued, and coagulated, but would rather be reduced to powder, because excessive dryness reduces to powders. But the other two elements, namely fire and air also concur in the mixture, because if earth and water concur, it is necessary that they concur tempered, and altered, but they cannot be altered, so that they are tempered, except by their contrary, because if the cold of water, for example, is in the highest degree, it cannot be tempered by moderate heat, but by the concourse of another highest heat, such as is in fire, for if the heat were moderate it would be consumed by the highest cold, but not tempered. Therefore that tempering of mixtures may occur from elements, it is necessary that all elements concur, if two concur as earth and water because of the heaviness of mixtures, and coagulation, which elements commonly dominate in mixtures, as we will say below from St. Thomas, for if any mixtures ascend, as certain fiery meteors, or even vapors, this does not happen from their own nature, but from the power of the sun elevating, or fire carrying; hence vapors left to their nature are resolved into water, just as also birds, although they can fly by vital power, nevertheless fall by natural weight.

The second difficulty is longer, and has several things more difficult to explain; for since mixture occurs from the substance of elements and qualities, it is doubted, both on the part of substantial forms, and on the part of qualities how mixture occurs. On the part of forms indeed two things are doubted. First, whether the substantial forms of elements formally remain in the mixture. Second, given that they do not formally remain, whether they remain virtually, and by way of a grade, as vegetative and sensitive in the soul. But on the part of qualities similarly two things are doubted. First, whether the qualities of elements remain in the mixture formally, or only virtually by reason of some third quality resulting from them. Second, whether this suffices, that elements are said to remain in the mixture.

To the first difficulty it is answered, it is certain that in the mixture the substantial forms of elements do not remain in act. This is common to almost all Philosophers, although Avicenna thought that the substantial forms of elements remain intact in the mixture, but the qualities are reduced to a mean. But Averroes said that the same forms of elements remain, but not perfect and intact, but remitted and imperfect. Nevertheless the opposite is clear from St. Thomas in I, q. 76, art. 4 ad 4 and Contra Gentiles II, dist. 15, question and commonly all follow, about which M. Bannes can be seen in this first book On Generation, ch. 10, question 2. The reason is both general, because several substantial forms cannot be in the same composite, because otherwise it would not be per se, and simply one as will be proved in the books On the Soul, question 1. And simply, because the forms of elements cannot simultaneously actuate the same matter, because they seek contrary qualities in the highest degree, and thus cannot be compatible in the same part of matter. But if they are in different parts, each of which has a different form of element, it will not be called a mixture, but an aggregate of many parts, having different forms in species, which is not to make one mixture per se. Similarly also these forms cannot remain imperfect, both because substantial forms cannot be intensified and remitted, but either the whole form is in matter, or nothing, but if they are not remitted, therefore either they remain intact, or they are others, and not the forms of elements themselves; for to posit some entities which are principles of forms, and not the forms themselves, is altogether absurd, since for natural composite only matter and form concur as extremes, but not another entity: besides that this whole is to posit several substantial forms, although imperfect in the same matter, and thus the same inconvenience is fallen into.

Wherefore from the substance of elements only matter remains formally in the mixture, but the forms of miscibles are corrupted, for indeed miscibles are altered, that they may be corrupted, and thus St. Thomas explained in this first book, lecture 25 at the end the definition of mixture, that it is the union of altered miscibles, and corrupted according to form. Nor did Aristotle ever teach that miscibles remain in act in the mixture, but in potency and virtuality, which he explains by reason of their qualities, in which as in the power of form they are contained, as we will say below. Nor is it an obstacle, that according to this doctrine from two elements, or from three a mixture will be able to be made, and it is not required, that always all four concur, because that which has some quality in the highest degree, will also be able to be tempered through reaction from a lesser quality, for example, the cold of water which is highest will be able to be tempered by the heat of air which is excellent, or by another lesser, and thus was the foundation which Aristotle and we posited before, that all four elements are necessary in the mixture. For it is answered, that if an element having heat in the highest degree suffers from an opposite which is not also in the highest degree, although in the first encounter it reacts, and is tempered, nevertheless it does not stop in that temperament, but will proceed further until that lesser quality is conquered, because that quality in the highest degree has stronger activity emanating continually from nature, and through that continual emanation will conquer the reaction of the lesser, and more remiss quality; hence that it may be reduced to a permanent temperament and mixture, it is necessary that it be resisted by another quality also having highest similar emanation from nature, or be supplied by a universal cause, that which ought to be done by the elemental, which is to fall back into the same, for that virtually is such an element. Wherefore if two elements concur to some mixture, it is necessary that the other two opposites concur, that temperament may be made permanently from both.

Regarding the second difficulty there is disagreement between Scotus, and Cajetan, and other Thomists, for Scotus in II, dist. 15, single question, seems to concede, that the forms of elements remain virtually in the mixture, not only by accidental virtuality by reason of qualities, but also by substantial virtuality by reason of grades, because the substantial form of the mixture contains the form of elements by way of a grade as the soul contains vegetative, and sensitive. But Cajetan in the first part, question 76, art. 4, and other Thomists hold that the form of the mixture does not contain substantially the forms of elements by that virtual containment, but only accidentally, and by reason of elemental qualities, as we will say afterwards.

The foundation of Scotus is, because even antecedently to the mixture of qualities the substantial form itself is essentially the form of the mixture, therefore it is essentially from the forms of elements and contains them, for the mixture as mixture contains virtually the miscibles from which it is, otherwise it would be a simple body, therefore since antecedently to qualities that form of the mixture is given, and mixed body, antecedently to qualities virtual containment of elements is given. Then, because qualities, and forms of elements perish, and that which remains of them is in so imperfect a grade as to qualities, that it can in no way virtually contain the form itself of the element, since mixed and tempered quality is not the power of the element, therefore the element cannot remain in the mixture virtually by reason of qualities, since the qualities which remain are not powers of elements, but deficient from them, therefore elements can only be contained in the mixture virtually by reason of substantial grade. But if it suffices to retain the qualities of elements weakened, and in an imperfect state, that elements are said to remain in the mixture, water when it is heated could be called a mixture, because it retains all four qualities, although in an imperfect state, namely heat because it is heated, and some cold because the whole is not expelled, and humid in an excellent degree with some dryness, both naturally had, and increased by fire.

But the foundation of Cajetan's opinion is taken from this, because if that substantial containment of element were given in the form of the mixture, it would be necessary that the mixture have an elemental grade as the soul has a vegetative grade, so that the nature of the mixture would be the principle of operations proper to the mixture and of operations proper to the elements by reason of the elemental grade, as by reason of the vegetative grade the soul operates, those things which are proper to vegetating nature: for truly and properly it nourishes, generates, etc. and thus a stone, for example, by reason of the elemental grade ought to ignite, or moisten like water, which by no means does not have the grade of that element since it does not have the operation. Moreover, either the mixture would contain by way of grade all the forms of the four elements, or only of some determinate element. If of all, it ought to exercise the operations of all, which nevertheless on account of their contrariety would impede themselves, as on account of the grade of fire it ought to ignite, on account of the grade of water to cool, and moisten, etc. which is against experience. If of only some element, therefore already it would virtually contain the remaining elements without substantial virtual containment, and thus it stands well that some elements are contained in the mixture, and not by reason of substantial grade, therefore the same will be said of all elements. Finally, element is not something common with respect to mixtures, as vegetative, or sensitive with respect to animals, but elements are bodies divided against mixture therefore element cannot be contained in mixture as a grade.

To the first foundation of Scotus it is answered that before qualities the form of the mixture is given, which results from corrupted elements or miscibles, and because it is made from their corruption, it does not contain them by way of grade, by substantial containment, just as neither does a mixed liquor contain the liquors from which it is mixed, but only that form, which results from such miscibles contains virtually, and radically those qualities, which were in the elements or miscibles, and in this way it is said to contain virtually accidentally the elements, not virtually substantially.

To the second it is answered, that the forms of elements perish in substance, and remain in power or quality, not that the same quality in number remains, but that some similar succeeds derived from the first miscibles. And when it is objected, that that quality, thus derived is not the power of the element, but of the mixture, since it is modified and tempered, it is answered to be the power of the element not in a perfect state, as it is in the element itself, but with some modification, as something derived from the element, of the same essential nature however with the power itself of the element, for if it had that in the highest degree, it would have it by way of ultimate disposition to the element, and thus would not be participated power, but proper to the element itself. Because however it is derived from the element itself, although modified according to the nature of the mixture, it is said to virtually contain the element, as many qualities which are participated from heaven in inferior things, as light or other similar are participatively celestial qualities, although not in that perfection, in which they are in heaven. But what is added, that in this way one element could be called a mixture when it participates all elemental qualities, the consequence is denied, because as long as such an element is not corrupted, although it is disposed through the quality of another element to corruption, it cannot be called a mixture, because it does not have those qualities, as reduced to temperament by the force of its form, but some as proper, others as disposing to corruption.

Regarding the third difficulty, some think, that the qualities of elements do not remain formally in the mixture, but virtually by reason of some mixed or middle quality virtually containing those extreme ones, and this because the form of the mixture is substantially one, arising from corrupted miscibles, therefore one quality also mixed ought to correspond to it as proper, which also Aristotle seems to assert in this second book, text 48, saying that from hot and cold one middle is made, which is not simply either of them.

Nevertheless the opposite should be said, namely that the formal qualities of elements remain in the mixture, for example, formal heat, or formal cold, reduced however to mediocrity. And so when cold and hot are mixed, each loses its intensity, which pertains to mode, but does not lose its substance, namely the very nature of heat and cold, without however that perfection, and excellence of intensity, and thus St. Thomas thinks in I, q. 76, art. 4 ad 4: "The proper qualities of elements remain," he says, "although remitted, in which is the power of elemental forms," and in De Malo q. 5, art. 5 ad 6 he says: "That qualities are contrary in the mixed body, as elements are contrary in the world." Whence the reason is taken, because in the mixed body we see qualities not only as to sense have the same change, as in elements, namely of hot and cold but also fight, and are contrary among themselves, as in the body of an animal contrary qualities fight and act on each other, therefore it is a sign that elemental qualities formally remain. Finally, if these qualities were not formally in the mixture neither would there be formal contrariety, and consequently the mixture would not be corrupted from an intrinsic cause, if indeed corruption happens through contraries, which mutually act on each other, but one quality conflated from all does not act on itself, that it may corrupt itself, therefore if they are corrupted intrinsically, they have contrariety intrinsically and consequently the qualities of elements formally, because in them alone this contrariety is exercised.

To the opposite foundation it is answered, that one quality ought not correspond to the form of the mixture, but it suffices that one proportion corresponds, and temperament of many qualities, because from their temperament the mixture arises, and therefore it retains those reduced to mediocrity, because however the form of the mixture is one, it will also be able to obtain some quality, which is one, for example, some active power, as a magnet attracts iron, or some color proper to the mixture itself, or something similar, but these qualities follow the form of the mixture, mixture is not made from their temperament.

To the testimony of Aristotle it is answered, Aristotle does not say, that from hot, and cold one middle is made, which does not formally contain cold itself, and heat, but that it contains both in one middle, that is, reduced to one temperament, or mediocrity, but not that some third quality results eminently containing cold, and heat.

You will object: How are those qualities of elements, if indeed proper passions cannot be communicated to other subjects, but these qualities of elements are their proper passions; and given that they could be communicated, not however exercising contrariety, which prevents that they be formally simultaneously, but even as remitted, those qualities are contrary. It is answered, that the proper passions of something can well be in the proper subject essentially, but in others participatively, as light is in the sun as in the proper subject connaturally, but in air participatively. To the other part of the argument it is answered, that remitted qualities indeed exercise contrariety among themselves, but not perfectly, and adequately, but imperfectly, and as to something, because indeed they are remitted, they do not subject to themselves totally, nor fill the whole latitude of the subject, hence they do not entirely expel each other from it, for that would be simply, and perfectly to be contrary, about which we will say more broadly below q. 10. But it is had in the opposite way in intense qualities. Nevertheless some contrariety is given in remitted qualities, because in some way they act on and suffer from each other, which cannot happen without some contrariety, and thus there is contrariety essentially, but not in all perfection.

Regarding the last difficulty it is answered, elements are said to remain virtually in the mixture, because qualities remain which are powers of elements in it. Thus it is taken from St. Thomas in I On Generation, lecture 24 at the end, and in I, q. 76, a. 4 ad 4, where he says: "That according to the Philosopher in I On Generation the forms of elements remain in the mixture not in act, but in power, for the proper qualities of elements remain although remitted, in which is the power of elemental forms." And it can also be seen in Contra Gentiles II, ch. 55, and opusc. 33, and other places. And so elements remain in the mixture not formally or virtually substantially, but virtually accidentally, as some form is said to remain in its disposition not ultimate, for the ultimate is always annexed to the form itself, but remote, and reduced to mediocrity. The reason is taken from what has been said, because there is no other mode of containing elements, except either substantially, or accidentally; substantially elements cannot be contained in the mixture, neither formally, nor virtually as in a grade: therefore virtually accidentally in the way which has been said.

But you will say: The power remaining in the mixture cannot produce elements, for indeed the heat of stone or iron is not such that it can produce fire; therefore as it is in the mixture it does not virtually contain elements, for that contains virtually, which contains something as in productive power of it. Second, a mixture made from liquors does not contain them, because it cannot produce those from which it was made; therefore neither will it be said to contain elements virtually, because it cannot produce elements. Third, because if from this a mixture is said to virtually contain elements, because it contains their qualities in remitted degree, a mixture will also be said to virtually contain all mixtures, and one element another; the consequent is false, therefore. The consequence is clear, because a mixture contains all four qualities, from which other mixtures are composed, similarly one element contains the quality of another, for example, air has heat not in the highest degree like fire, but less intense, therefore it will be said to contain fire virtually, because in remitted degree it contains its power, namely heat.

To the first it is answered, the power of the mixture can virtually produce an element, not immediately, but mediately, and with the disposition which it has growing, which is not ultimate with respect to the element, but remote as we said, and thus with its intensity growing, and coming to that perfection, which it has in the element, it will be able to be produced from the mixture, and thus from the extrinsic mixtures have to be resolved into elements at least mediately.

To the second it is answered, that when one mixture is made from other mixtures, as from liquors, if it retains not only elemental qualities, which are common to every mixture, but also particular, and proper to those liquors, it will also be said to contain those liquors virtually, as wine tempered from water contains its quality, but if it is tempered from another liquor, it imbibes its quality. But if the species of liquors is so dissolved, that proper qualities do not remain, but only the common qualities of elements, then the mixture will not be said to virtually contain those mixtures. And because it is certain that elemental qualities, always remain in every mixture, because they are common to all, but it is not certain that proper powers of mixtures always remain in other mixtures, therefore it is absolutely said, that elements remain virtually in the mixture, but not that one mixture remains in another.

To the third it is answered from what has been said, it cannot be said, that one mixture virtually contains other mixtures, unless it retains their qualities, which does not always happen, as if something is made from a magnet it does not contain the attractive power of iron, but it contains qualities, or common powers of elements, and therefore it is absolutely said of mixtures, that they contain elements, that is, proper powers of elements. But one element is not said to contain another virtually, both because the quality, which it has, is not derived from another element, and thus is not its power; and because, although one element has something of one quality of another, but not of all, which are in such an element, as air although it contains some heat, which is found in fire, nevertheless does not contain anything of the dryness of fire, and thus does not virtually contain the element of fire, because it does not participate of all its quality, but only of part. We will say more about mixtures in question 11, for here we deal not with the nature of mixtures, but with mixture.

QUESTION VII.
ON CONDENSATION AND RAREFACTION.

ARTICLE I.
Whether rarefaction and condensation are terminated first and per se to quality?

Nothing is more known than density and rarity in bodies, for we see and experience this daily, and their sensible effects by which they are defined or described are very well known, namely dilation of parts of quantity in the rare, contraction or compression in the dense. Hence the Philosopher in the predicaments defines rare to be that which has little matter under large dimensions: dense on the contrary that which has much matter under small dimensions. But whence it comes that quantity is so disposed, that it can enclose much matter under small dimensions, or little matter under many, whether from some superadded quality, or from some other entity, or mode, is obscure and difficult.

In this authors are divided, and all opinions are reduced to three. The first affirms that new quantity is acquired through rarefaction, and lost through condensation. Which some of the ancients so accepted, that they said in any condensation or rarefaction the whole quantity is lost, and a new one substituted. But others only that some part is acquired, and part lost. Which is usually attributed to Scotus in the fourth, distinction twelve, question four, Mars. Hervaeus and others, whom P. Rubio cites in the treatise on rarefaction, question one.

The second opinion affirms that rarity and density occur through diverse position of parts, and are terminated to it. But this is explained in two ways. First, by saying that rarity and density occur through mere compression or dilation of parts, because in bodies pores are found, that is, certain very subtle openings, which are filled by other more subtle bodies, and when condensation occurs these pores are packed together, but when rarefaction occurs they are loosened, and all this pertains to the position of parts in place according to greater or lesser compression. But others explain thus, that condensation and rarefaction do not consist in mere compression or dilation of parts, which pertains to site, but in greater or lesser local presence itself, which pertains to extension in order to place or to where itself.

The third opinion finally affirms that condensation and rarefaction are not terminated to quantity, or to where, but to a certain quality thus disposing quantity itself, that it seeks greater or lesser extension to place. And so this opinion does not deny that in density contraction of presence and local extension occurs, but in rarefaction dilation, but it says this is an effect arising from some disposition of quantity, which is so disposed through some quality, that it has that effect, as quantity is terminated through surface, and thence some quality which is figure results. But whether this quality is always required, that this effect be given, or only connaturally seeks it, will be investigated afterwards.

I SAY FIRST: Condensation and rarefaction do not import any addition or diminution of quantity, neither total nor partial. This assertion is constant among Authors of the second and third opinion, whom we will refer to afterwards, and is taken from the definition of the Philosopher adduced above: Dense is that which has much matter under small dimensions. Where by the name of dimension is not understood quantity itself, as it orders parts in order to the whole, but as it extends and diffuses it in order to place, by reason of which external measure of quantity, or its dimension is taken, for if we speak of quantity itself according to itself, this is not added or taken away, unless matter is added or taken away, whose parts it extends; hence it is repugnant to have much matter that is, many parts of matter, and not much quantity, or vice versa. And the foundation of the conclusion is taken from here, because when new quantity is acquired, or part of quantity, new matter ought to be acquired, for in the same part of matter new quantity cannot be given, or part of quantity, for thus it would be penetrated with the preceding, therefore it is necessary for new quantity, that new matter be added, which is newly ordered in the nature of part, and therefore augmentation is always joined with some aggeneration, or nutrition, therefore if in rarefaction and condensation, new part of quantity were added, or diminished, it would be necessary that new matter also be added, and thus new substantial mutation ought to occur, which nevertheless is false, since we see water and wax rarefied or condensed, without new generation of water or wax, otherwise that matter would remain augmented, and would be much matter, not little, under large dimensions contrary to the definition, and therefore excellently St. Thomas compared rarefaction to intension, for as intension occurs not with quality added, nor in diverse part of quantity, so rarefaction occurs with the same matter remaining, and not augmented. Finally, if new accession of matter or substance occurred as also of quantity, it would be necessary that that matter be disposed by other accidents namely that it be converted, or added to the preceding, as we see occur in nutrition, and aggeneration, without which nevertheless rarefaction and condensation occur, and without corruption of surrounding bodies, therefore it does not aggenerate new substance for itself, and consequently neither new quantity.

I SAY SECONDLY: Rarefaction and condensation are not terminated only to where, or to distance, or propinquity of parts or to their site and position, nor do they consist in mere filling of vacuities, which are pores, or compression of parts, but these are effects following upon density and rarity, and sometimes can occur without formal density and rarity. The reason for the conclusion is, because rarity and density is something pertaining to parts of body in order to itself, and not in order to place, although they can have some effect also in order of extension, or situation in place, therefore it cannot be terminated first and per se to where or site. The antecedent is proved, for in the body of Christ the Lord in the Eucharist, in which there is no commensuration to place, there is rarity and density, for bones are denser than flesh, as also harder, and blood rarer than both, otherwise if that diversity in parts were not preserved, diverse heterogeneous and organic parts would not remain. Similarly density and rarity are not only in external surface or ordering around place, but also within parts; for division having occurred parts are found packed and dense within, therefore density and rarity are not only terminated by where. Which will be more clear from the following assertion showing, that rarity and density are qualities.

But that it does not consist in filling of vacuity, or dilation, so that rare is what dilates pores, dense what fills or compresses, is manifest in air, and in heaven, for some parts of heaven are found dense like starry parts, and others less dense, namely diaphanous, and yet there pores are not, because they are not filled by another more subtle body, which is not celestial, since there elemental body is not. Air similarly is rare, and does not have pores, both because it is of fluid substance, and by flowing would fill them, otherwise air or water would be detained between pore and pore lest it flow; and also because in air if there were pores they ought to be filled by another more subtle body, which nevertheless is not given, unless perhaps fire, which nevertheless cannot be in every part of air. Finally, density does not consist in compression of parts only, as is clear concerning density of the body of Christ in the Eucharist, in which parts cannot be compressed, and in heaven density does not occur through local compression of parts. Finally, compression of parts, either occurs through local motion, or situation, as because one occupies less, or more of space, or occurs through internal disposition of parts, as from greater cold constriction occurs, and from heat dilation, although that diverse occupation of place follows as an effect. If in the first way only, it is clear that rarity and density are not saved as is clear if in two vessels of the same position dense liquor is placed in one and rare in the other, then each occupies the same position of place, and does not have the same rarity, nor density. If in the second way, therefore density and rarity do not say mere compression of parts and situational position, but some internal disposition, and this pertains to quality, as we will now say, and simultaneously explain, when without formal density or rarity compression or dilation of extreme parts can remain.

I SAY THIRDLY: Rarity and density formally are physical and natural qualities, and thus rarefaction and condensation are alterations, nevertheless situational and extrinsic density or rarity is also given, which is not quality, but site, and has itself as effect of density and rarity which is quality, although sometimes it is not repugnant that these effects occur without quality. This conclusion as to the first part, that density and rarity are qualities, is express in the Philosopher in Physics VII, text 21, and Physics IV, text 89, and St. Thomas in the same place, and in On Generation I, lecture 14, where he says: "That transmutation of rarefaction cannot be called augmentation, but alteration, for it occurs according to transmutation of passible qualities, namely rare and dense." And in I, q. 77, art. 4 ad 3: "Rare," he says, "and dense are certain qualities following upon bodies from this that they have much or little of matter under dimensions." And the same opinion is commonly followed by Authors, who can be seen in the Carmelite Course, On Generation I, disp. 7, q. 2 and 3, Coimbrans book On Generation ch. 5, q. 17, Rubio treatise on rarefaction. q. 2. Nor is it an obstacle that Aristotle in the chapter on quality says: "That rare and dense, rough and smooth seem rather to show a certain position of parts;" and St. Thomas in On Generation II, lecture 1 on text 8, says: "That rare and dense are not physical qualities, but position of parts of matter according to near in dense, and remote in rare." I say it is not an obstacle, for they speak of situational rarity and density which is usually the effect of formal rarity and density, as external situational figure is given, and internal, which is quality, for the hand being contracted or extended situational figure is varied, but not intrinsic, which is quality. Similarly rarity and density is given, which pertains to internal disposition of parts of quantity and conduces to generation and corruption and is commonly joined with some softness or hardness, and thus ought to be quality. But site itself of compression, or dilation of parts, is situational density or rarity. And thus this conclusion is proved, because in density and rarity contrariety is found, intension and remission is found, for one is more dense than another, disposition conducing to generation or corruption is found, as an animal if it is too much rarefied, and swells, is corrupted; if parts are solidified, it grows strong, and in diverse parts it requires diverse density or rarity, as bones ought to be denser than flesh, and flesh than blood, therefore they conduce to conservation, and to generation and corruption. And as for this reason natural place adds above mathematical, some conservative qualities, because it conserves the located, so rarity and density, because they dispose to conservation, and to generation and corruption, will pertain to quality. Finally, they are tangible through sense, as experience demonstrates, therefore they pertain to quality, like soft and hard, cold and hot.

And if you ask to what species, it is answered that to the third, because they can result from mixture of other qualities, namely from cold or heat, through themselves also they are ordered to generation or corruption and bring passion to the senses, therefore they are passible qualities. Whence it follows that they can terminate alteration per se, because alteration is to the third species of quality. Nor is it an obstacle, that rarity and density are found in heaven, because rare and dense are said equivocally in heaven and in us, as St. Thomas says in II, disp. 2, q. 2, art. 1 ad 5. And it is clear that the same quality can sometimes come from diverse causes, or be ordered to diverse effects, as figure sometimes results from alteration of qualities dissolving parts of quantity, sometimes without such alteration from mere division through local motion; and similarly light in inferior things serves for generation and corruption not in heaven: thus density and rarity in inferior things serves for this, that a thing be generable or corruptible, but in heaven that it be actively generating or corrupting, which is to be said equivocally as to this effect, simply nevertheless they are of the same species, because they change sense in the same way which is principal in passible quality.

But that sometimes situational density and rarity is given through diverse position of parts without quality, is clear, because that which pertains to position of parts, and site, is an effect of this density or rarity, which is quality, but it is not repugnant that some effect come from diverse causes, as we said concerning figure. Similarly therefore through compression of parts, or loosening some effect of rarity or density can occur, which is situational density or rarity as when we divide water or air, then the divided parts are not penetrated with others, but compressed, otherwise division could not occur, and this compression is a certain density, density being taken for effect, or situational position, not for quality, nor does it require corruptive alteration, but local motion, otherwise all local motion, which occurs outside a vacuum would require alteration producing density or rarity, since local motion cannot occur, except by dividing some body, and divided parts cannot be penetrated with others, therefore they ought to be compressed, and condensed, and yet there alteration is not given, but only local motion. Whence also after the day of judgment motion of bodies especially glorious will be given, which motion will divide air or water making the said compression of parts, and yet then there will not be physical alteration. But if such compression or loosening of parts occurred, that it also tended to corruption, then it would not occur without alteration, and consequently neither without quality.

I SAY LASTLY: Density and rarity do not have themselves as active qualities, but passive, thus however disposing the subject, that active qualities joined to them are more or less disposed to operating. This conclusion is deduced from what was said in the preceding question, because rarity and density follow ordering of parts of quantity, as figure termination, for density makes many parts of matter under small dimension of place, and rarity the contrary, therefore as quantity is not active, nor figure, so neither density and rarity. Whence we do not see, that rarity and density through themselves alone produce similar qualities, but use activity of others, e.g. heat or cold even for producing rarity or density, for a stone however much it is joined to wax or mud, will not condense them, but through cold they are condensed, or through compression of parts, therefore density and rarity are not active. But if active quality is received in denser quantity, it will operate more quickly and efficaciously, as experience itself testifies, and we said in the preceding question, insofar as parts thus condensed conduce to more efficacious operation, as also round figure more conduces to motion, than square, and for penetrating sharp more than obtuse.

Arguments are solved.

First, it is argued: To prove that through rarefaction greater quantity is acquired, because rarefaction having occurred there are more indivisibles in act than before, therefore more quantity. The consequence is clear, because indivisibles cannot be without parts, therefore with indivisibles added, parts are added. The antecedent is proved, because rarefaction of water having occurred in a vessel, of which it occupied only half before rarefaction, afterwards the termination of quantity grows, and correspondence to other points, or indivisibles of the vessel, or place to which it did not correspond before, therefore there are new indivisibles, for the old ones correspond to the same as before, and cannot correspond to different indivisibles of the vessel.

It is confirmed, because through condensation a smaller place is occupied than before, therefore if quantity is not diminished; those parts are penetrated. The consequence is clear, because then greater quantity occupies the same space, which lesser did, therefore within a smaller place parts are placed, which before occupied more place, therefore they are penetrated in it. Nor can it be said, that this occurs through quality thus disposing parts of quantity, or through new site. For against this is, both because it does not pertain to quality to order, and extend parts of quantity; but if it occurs by situation alone, rare and dense will not pertain to quality; and also, because it remains to be explained, how that quality removes penetration of parts, which now occupy a smaller place than before.

It is answered that concerning this argument Authors think in different ways. Some think that as many points, and indivisibles are found in act in greater, and lesser quantity, by that common example of the smaller circle included in the greater, for all lines, which pass from the center to the greater circle pass through the smaller, therefore as many points, or lines are in one as in the other. Thus the Coimbrans in On Generation I, chapter five, question seventeen, article four. Others like Rubio think on the contrary that there are not as many points in lesser quantity as in greater, nevertheless the same quantity with the same points can correspond to more, or fewer points of another body, or quantity only by reason of diverse disposition, or situation of the same quantity, as is clear in those circles, because if straight lines were made from them by extending the circles themselves, then not all lines of one would pass through lines of the other, because one of them would exceed the other, if nevertheless they are reduced to a circle, whatever passes through the greater circle, passes through the smaller, and for the same reason the same points of condensed water, rarefaction having occurred correspond to other points of the vessel, or place because of diverse disposition of quantity.

Nevertheless neither solution is intelligible. For greater quantity exceeds lesser in multitude of designated, and aliquot parts, therefore it ought to exceed in designated points, by which those parts are united, for it does not stand to posit more parts in act, unless more points, and indivisibles are added, by which such parts are united, and certainly that which is said of two unequal circles, of which one is included in the other if they are extended into straight lines clearly demonstrates this; for that line of the smaller circle will remain much smaller than the line of the greater circle, and then if one of them is placed next to the other it will be clearly seen, that lines of the smaller circle do not correspond to all indivisibles, and lines of the other, therefore more points, or more lines are in the greater circle, than in the smaller; from which also it is proved, that by reason of diverse situation, and position of lines, a point of one cannot correspond to many points of the other, for diverse position cannot remove the nature of such indivisibles, therefore if in both positions one and the same indivisible remains it cannot correspond to many of the other, since one indivisible cannot correspond to a part, because it is disproportionate to it, therefore neither to many indivisibles, because many indivisibles pertain in fact to diverse parts, for one is not immediate to another, therefore it cannot correspond to many unless it corresponds to the interjacent part. And to the argument about lines which are drawn to the center from the greater circle through the smaller, it is answered that all those divisively pass through the smaller circle, but nevertheless not all which are found in the greater circle in act are found in the smaller, nor is it possible that all, which are in the greater circle collectively taken pass through the smaller to the center, unless one line passes over another, although any divisively, which passes to the center, ought to pass through the smaller circle, but collectively not all are taken in the smaller circle, unless one is over another, since more parts in act, and consequently more lines, and points ought to be in the greater circle, than in the smaller. But there are in potency infinite parts, and points in both circles, speaking of proportional parts, and communicating themselves, not of parts, and lines composing in act, as we showed at length in question fifteen and twenty of Physics. But we in the present speak of lines, and points, which are in act, and of these we say there are not as many in greater quantity, and in lesser, nor can one correspond adequately to many.

To the argument made therefore it is answered, that rarefied water has more points and indivisibles, than before, not however more parts, but greater explication, and dilation of the same parts. For explication, and extension of parts as to place occurs through new, termination of quantity, and consequently through addition of indivisibles, and points, by which new termination, and extension of quantity to place occurs, because as we will say immediately the same part, which is connected by a single indivisible with another, can be connected by many, because the indivisible corresponds inadequately to the part, and not adequately, and therefore there is place, that the same part correspond to many indivisibles, and then it is said to be dilated, when the extension of the part in place is explained by many indivisibles, but then it is contracted, when it is connected by a single indivisible, or fewer. And thus it is not a good consequence, there are more indivisibles, therefore more parts, but either more parts, or greater explication of the same towards place.

To the confirmation it is answered, that in condensation parts are compressed not penetrated, nor do they occupy the place of another total quantity, but place adequate, and commensurate to themselves according to disposition of parts. But how compression of parts is understood without penetration, when parts which before occupied diverse space, now occupy one, is difficult to understand. But other explanations being omitted, it seems more probable, according to the doctrine handed down by us in Physics VI, question twenty, article two and three, that a point affects part of a line not adequately, but inadequately, because divisible part and indivisible point are not adequately proportioned, and the same is true of other indivisibles with respect to their parts. Because therefore any point affects something of the part, because immediately after the point follows the part, which is divisible, and is not adequated to it, in this there can be more, and less, namely that that divisible entity, which is affected immediately by the point itself, is affected more, or less inadequately, for if it does not correspond totally, and adequately to it, certainly neither does it correspond indivisibly, and in one way, but can correspond more, or less. Wherefore when quantity is rarefied, it is not necessary to add more parts, as has been said, but more points, because a part which corresponded inadequately to one point, is made corresponding to many, and thus is loosened. But when it is condensed, that part is made corresponding inadequately to one point, although it can correspond to many. And therefore those parts are not penetrated, because for penetration it is required, that many distinct parts existing according to diverse indivisibles, are placed according to the same under the same space, but if points, or indivisibles are diminished, and parts are reduced, that they may be under fewer points, then they are said to be compressed, or condensed, nor yet penetrated, because never existing under diverse points, or indivisibles, are they placed in the same space, which is required for penetration, for penetration requires that many parts in act, that is, terminated by diverse indivisibles be placed under the same space, but penetration does not occur through this, that parts which before had many terminations now have one, and become parts as if in potency. Whence the Philosopher says in Physics IV, text 84, that to be rarefied is, that great dimension, which before was in potency becomes in act, which indeed is understood of dimension as to local termination, which occurs through points, and indivisibles.

Secondly, it is argued: To prove that rarefaction, and condensation are terminated per se first to quantity, not to quality; for rare is defined as that which has little of matter under great dimensions, but dense on the contrary, where no mention is made of quality, but only of dimension, but dimension, whether in order to the whole, or in order to place, pertains to quantity, or at least to site. Then, because we see through rarefaction quantity is more explained, or extended as to place, therefore new quantity ought to be acquired, for extension as to place is proper passion, and mode of quantity, therefore new extension to place, requires new quantity. Finally, because otherwise quantity would receive more, and less, since the same quantity existing, it explains more, or less parts of substance, as intension of whiteness consists in this that it explains itself more, or less into act, and is rooted in matter, indeed as intension is not acquired, except with new grade acquired on the part of quality, so neither rare, and dense without new part of quantity. It is confirmed, because without any quality rare, or dense is posited, therefore quality is superfluously posited. The antecedent is clear, both because that quality of rarity is not received except in a subject having dilated parts, and density in having compressed parts, therefore that disposition, or position of parts does not come from quality, but is supposed; and because that dilation of parts being posited without other quality, rarefaction is sufficiently understood, to what therefore does that quality serve? For dilation through situation, or position of parts in place is sufficiently understood; and finally, because if extension in place is a mode, and property of quantity, it does not need quality, that it may emanate from it.

It is answered to the principal argument, denying the assumption. To the first proof we say, that by the name of dimensions of rare, and dense is not understood quantity itself according to itself, but according to commensuration to place, which the same quantity can vary according to density, and rarity. But, rarity itself, and density do not consist in this, that in fact quantity is so extended, and situated, for this is its effect, and in the body of Christ in the Sacrament there is given density, and not situation in place, but it consists in such disposition of parts, which seeks that situation for effect. And thus although mention is not made of quality in the definition of rare, and dense explicitly, nevertheless it is understood implicitly, because it is the same to say rare is what has little matter, and to say that it is disposed to have little matter under great dimensions. But how in the Eucharistic species rarefaction, and condensation are given when no matter is there, it is answered that substance is not there formally, but is supplied in quantity, insofar as through separation it bears the role of substance.

To the second proof it is said that extension to place is proper passion of quantity, but that it be so much or so much, is accidental to it, and is disposed through some quality, nor is it necessary that greater extension be given, that new quantity be added, as also that the heavy be moved more quickly near the end, than in the beginning, does not need addition of gravity, so any quantity that it be diversely extended, and situated towards place, does not need addition of quantity, and parts, although some quality is given thus disposing parts, that they correspond to new indivisibles, so that they are more or less loosened.

To the third proof it is said, that quantity does not receive more, or less through this, that that extension becomes greater or lesser, but rarity itself, or density receives more, or less. But quantity itself in the nature of ordering parts outside parts, is not rooted more or less in the subject, that that greater, or lesser extension occurs, for quantity in the nature of quantity cannot be more rooted in the same part of the subject, nor receive other augment than through addition of parts, which is not intension, since it does not occur in the same part of subject, but in diverse, otherwise those parts would be penetrated. But rarefaction which more dilates parts does not make quantity more rooted, and perfected in the subject, but makes rarity itself, which is quality, more rooted, and in order to place dilates quantity.

To the confirmation it is answered denying the antecedent. To the first proof it is said, that rarity is not subjected except in having dilated parts, not before rarity itself, but through it, as soul is said to be act of organic body, which nevertheless through the soul itself, is both body, and organic. Nor yet does rarity seek parts to be dilated in act, but only in aptitude, as in the body of Christ in the Sacrament it has rarity, and density without situation in place. To the second proof it is said, that dilation of parts being posited as to site rarity, and density are understood presuppositively, because quality, which is rarity, is cause of that dilation and situation of parts, which is its effect, if nevertheless sometimes that situation is given without such quality it will not be formal rarity, which is disposition of parts ordered to conservation or corruption, but will be something pertaining to situation of parts following from local motion without formal rarity, as was explained above. To the third proof it is said, that although extension to place is passion of quantity, nevertheless that it be so much, or so much is accident, and pertains to quality, insofar as it conduces to temperament of parts, that they may be better conserved, or corrupted. Nor would it be repugnant to say, that quality is passion of quantity, as is clear in figure, although rarity and density in inferior bodies, insofar as they occur from mixture of primary qualities, cannot follow immediately to quantity, but through primary qualities mediating.

If you ask: Whether rarefaction requires local motion, by which that greater extension of place occurs besides alteration by which rarity itself occurs, the Coimbrans affirm here quest. 17, art. 5. But it is not necessary to posit local motion distinct from alteration itself, but this is common to all motions, or mutations, which can attain, or vary termination of quantity, that they have power of producing some where not directly, and per se, like local motion, but consequently, and mediately insofar as where follows extension of quantity, as generation of substance produces where mediately, insofar as it generates substance in place, and augmentation produces where, insofar as by adding quantity, it places it in place, and similarly that alteration has this which loosens, or contracts parts of quantity. Wherefore it is not necessary to assign local terminus a quo, which is abandoned; because place or where is not acquired through local motion, which abandons one place, and acquires another, but through actions varying termination of quantity, which mediately acquire where, not destroying the old absolutely and totally, but adding new, they destroy nevertheless the old as to termination, which they had before.

ARTICLE II.

Whether without rarefaction, and without addition of quantity something can be made greater than another?

Some affirm, and for this opinion Durandus is cited in II, dist. 18, q. 1, the Master of Sentences, there Henry, and others. And the foundation is taken from what was said in the preceding article, because rarefaction is motion to quality not to quantity or extension to place, except consequently: therefore God will be able, without rarefaction to extend quantity in place, and make it great, neither with parts of quantity added, nor with rarefactive quality added, for as matter is in potency to great, and small through rarity or quantity according to a natural agent, so through obediential potency it will be able to be made greater without quantity or rarity added, because this is only a natural medium or of a natural agent. It is confirmed: It is probable that God can place one body in diverse places with the same density standing, therefore he will also be able to place it in a place immediate to itself, and then it will be continued with it and will be greater, because it will occupy more places, and without addition of quantity, because it is the same body, and without rarefaction, because it retains the same density. It is confirmed secondly, because God made Eve from Adam's rib, not through rarefaction, for thus she would not be of similar flesh and bones, if it were so rarefied, nor from other matter joined, because this ought to have been greater, than Adam's rib, and thus from that rather than from the rib Eve would be said to be made, therefore, etc.

St. Thomas holds the opposite opinion in I, q. 92, art. 3, where he says: "To say that matter is multiplied without rarefaction, is to say contradictories are simultaneous, namely definition without the defined," and in II, distinction 18, question 1 against the Master of Sentences and others he affirms, that it is unintelligible, without addition of matter or quantity that something be made greater except through rarefaction. And many follow St. Thomas who can be seen in the Coimbrans ch. 5 On Generation q. 18, art. 1, and Rubio in the treatise on condensation q. 3, but this is understood of rarefaction both according to quality, and according to site or position of place, as we will say immediately. And it is proved, because it implies understanding quantity to be made greater without new terms of quantity, which were not before; but terms of quantity are only, either in order to itself or in order to place. If in order to itself, that is, to the parts themselves according to themselves, necessarily a new part is added, for the same parts standing, the intrinsic terms of quantity are not changed, which consist in this, that it is to have more or fewer parts, therefore the same parts standing, and not having more than before, quantity is not greater according to order of parts inwardly, than before. But if terms are changed in order to place, greater dimension, or extension to place is added, without addition of parts, and this is to be rarefied, because in this the definition of rarefaction consists. And so that which is greater than another according to quantity, in its essential concept says, either that it has more parts, than that which is less, or that it corresponds to more parts of place according to extension, and the first is addition of quantity, the second rarefaction.

But you will inquire: Whether dilation of parts, or actual compression in place ought necessarily to occur through quality itself, which is rarity, and density, as through medium naturally required or even essentially. Some affirm, that it is essential as Rubio treatise on rarefaction q. 3, n. 164, and the Coimbrans here q. 18, art. 1 and 2, although they think the opposite also probable. And when the argument is pressed, because the formal effect of that quality which is rarity is not to place parts thus extended as to site, but to render the body thus disposed, that it seek that situation, and therefore that situation can be separated from that quality, they respond that that quality necessarily connotes that situation of parts, and without it cannot be understood, as neither the effect of white without whiteness, otherwise density, which is quality, could remain, with the body itself situationally rarefied, and loosened, which is repugnant, but would not be repugnant if this situational extension could be found without rarity which is quality, for this alone is contrary to density. But against this I press, because situational extension, or compression is secondary effect of rarity, or density, and is separable from it, as is clear in the body of Christ in the Eucharist, where density of flesh, and bone remains, or rarity of blood, without any extension as to place, therefore if rarity can remain without extension to place, also with small extension it will be able to remain, or density with great. And this is so, because rarity does not say actual extension itself to place, but aptitude for it, which can stand with the opposite act as gravity with ascent, and aptitude of accident for inhering with actual separation from subject, thus rarity which is aptitude for dilation of place stands with actual compression of parts, therefore quality is not essential medium for actual extension to be dilated, or compressed, but without quality, which is rarity and aptitude for dilation of site of parts, indeed with opposite quality which is density that greater situation in place will be able to be given, although connaturally it requires quality when it occurs with alteration, as ascent upwards can be given in the heavy, not through contrary lightness as medium. And therefore without addition of parts, or situational rarity, whether it occurs with quality, or not, something cannot be made greater, than before. Whence St. Thomas in the places cited above in rare and dense did not name quality, but only dimensions, which pertains to site, otherwise his reason would not conclude, namely that it would be to posit definition without the defined, since the definition of rarity, as it is quality is not to have actually parts of matter under great dimensions, but to have disposition, or aptitude for great dimensions under small matter.

To the reasons for doubting to the contrary. To the first it is answered that alterative rarefaction is motion to quality, and therefore without it is not found, but non-alterative rarefaction can be found without quality, not however without some situational dilation, which connaturally requires quality, not essentially, and therefore without rarefaction at least situational, or addition of parts, something will not be able to be made greater, but well without quality. And when it is said, that matter is in obediential potency to great, and small without rarity, we deny the antecedent, because not only rarity is natural medium, but also essential speaking of rarity, not only as it is quality, but also as it is site, as has been said; for it pertains to the definition itself of rare, as St. Thomas says to have great dimensions with small matter.

To the first confirmation it is answered that that opinion is not admitted by us, as we showed in Physics IV, q. 16, but it being given not conceded it is answered, that if the same body were placed in a double immediate place so that it were not only contiguous, but continuous, by this itself it would be reduced to the same place, and would not occupy greater, because it would be continuous to itself, but nothing continued to itself makes addition; but if it were contiguous, and not continuous it would be double surface and not one, and thus would not be the same quantity, but divided as terminated by double surface, whence it does not make a greater thing, but as if double.

To the second confirmation it is answered, that Adam's rib was built into woman through accession of new matter, either made through creation anew or through conversion of another, as St. Thomas thinks in the cited places. And to the reply it is answered dist. 18 cited to 2, that woman is not said to be made from that superadded matter, but from the rib, because the rib was first through which the remaining matter pertained to formation of woman, as although the embryo grows by accession of new matter, and becomes of due quantity, nevertheless it is not said to be made from acceding matter, but from seed, and first matter, which has itself as foundation of formation of the whole body.

QUESTION VIII.
ON NUTRITION AND GROWTH.

We are dealing with these motions in the present, not insofar as they are from the soul and properly belong to the animated body, for in this sense they pertain to the books On the Soul, but insofar as they occur with some generation or corruption, and thus are commonly related to aggeneration itself.

ARTICLE I.
What are growth and nutrition and how are they distinguished?

We are treating these two topics in the present because they are closely related: what growth and nutrition are and how they are distinguished.

Regarding the first, we assume the definitions of nutrition, and we inquire whether such true nutrition is found in nature. Nutrition is defined as: The conversion of nourishment into the substance of the nourished. Growth: A motion from lesser to greater quantity. Aggeneration: The partial acquisition of substance, just as we also see in fire acquiring and converting parts of paper into itself.

Therefore, some denied that nutrition occurs even in living things, but only that the substance in which something was first generated pertains to the substance of the living thing and its parts are expanded, but it does not acquire new substance from nourishment. Rather, that substance of nourishment only serves as fuel for natural heat. This was the opinion of the Master of the Sentences in Book II, distinction 30. Similarly, there were some ancient philosophers, as Aristotle reports in On the Soul II, text 40, who said that even non-living things are nourished, and indeed that all animals are nourished by the power of fire, for we see fire consume other bodies and convert them into itself.

Nevertheless, regarding this let there be one conclusion: True nutrition occurs in living things through the conversion of nourishment into the substance of the nourished, but not in non-living things. The first part is common to theologians and philosophers, and St. Thomas teaches it against the Master in the First Part, question 119, article 1, and in Book II, distinction 30, question 2, article 2, and in Quodlibet 8, article 5. And the foundation is taken from two points. First, because we see the human body grow, and all those parts are first and per se informed by the soul, since we see them sense and be vivified, like other parts. Therefore, they either come about through the creation of new matter, or through the conversion of nourishment into it, or through greater rarefaction. Not through the creation of new matter, because the creation of matter is not a work of nature but of creative power, and thus nutrition, which is an operation of the vegetative part, would not be a natural work, but exceeding nature. If it is through conversion, it is what we intend. If through rarefaction, it follows that the body of a grown man would be rarer and less solid than that of a newborn, the contrary of which we see by sense. Finally, the conclusion is proved because nutrition is ordered to restore what is lost through natural heat: therefore what it restores must pertain to the truth of human nature, otherwise it would not be substituted in place of what is lost. Nor can it be said that that first substance which is received in generation is not touched by natural heat, since it is clear that it is a corruptible substance, just as it is generable, therefore it can be changed and lost through alteration, just as it finally fails and perishes in death itself. Therefore that first substance can also be gradually lost from the beginning, and another substituted in its place.

The second part of the conclusion, namely that non-living things are not nourished, is the opinion of the Philosopher in On the Soul II, text 46, and of St. Thomas there in lecture 9, and in this book On Generation I, text 42, lecture 17. The reason is that we say something is properly nourished which, through the power it has, consumes something of its own substance and restores it through the conversion of adjacent matter into its own substance. But it is clear that this is not found in non-living things, since neither does the proper power of a non-living thing, e.g. fire or water, consume anything of its own substance, but of another's, nor does it restore lost substance and conserve the previous substance through the conversion of extraneous matter. Therefore it does not have proper nutrition, such as occurs through the internal reception of nourishment and conversion into its own substance. However, a certain similar nutrition is found in inanimate things, insofar as they can lose something through an extrinsic contrary agent, though not through their own power, and through aggeneration aggregate to themselves something of adjacent matter, which is rather a generation and multiplication of itself from applied matter, though it is aggregated to the previous through continuation.

But you may object: Because lost substance cannot be restored through substantial heat, both because radical moisture cannot be restored, as doctors teach, and similarly theologians who place in it the marvelous effect of the tree of life, that it restored radical moisture lost through natural heat, therefore nutrition from common nourishment is not sufficient for this; and also because otherwise man could not die or become ill from natural causes if he took only as much nourishment, and as temperately, as he loses of his own substance, for thus radical moisture would be perpetually sustained so as not to perish. It is confirmed from Matthew 15: "Everything that enters the mouth goes into the stomach and is expelled as waste," therefore nothing passes into the substance of the nourished, since everything is expelled. It is confirmed secondly, because true nutrition requires that the soul of the living thing be united to the matter of the nourishment, converting it into its own nature, but this is impossible, especially in man, because for this a new union of the soul would have to be made to that new part, although the whole soul was already united to the pre-existing parts.

How therefore can that union be changed to a new part? And especially since it is a spiritual union, like the soul itself, how can it be made by corporeal power, such as the heat or power of the nutritive faculty?

I respond by denying the minor premise. To the first proof it is said that radical moisture can be repaired through nutritional moisture, but not with the vigor and perfection it had in the beginning, because every agent in acting is acted upon and weakened. But in this the tree of life had excellence, because it had the power of strengthening radical moisture against the weakness coming from the mixture of the extraneous, and rendering it as pure as in the beginning, as St. Thomas teaches in the First Part, question 97, article 4. And man would need to take of that fruit more often, because it had limited power, and could not repair the weakness that would come from nourishment taken afterwards, unless it were taken again. Therefore man cannot always live, because he is so affected by foreign qualities from extraneous and nutritional moisture that finally radical moisture is dissolved and the animal perishes. See St. Thomas in the First Part, question 119 cited above, ad 3 and 4.

To the first confirmation I respond from St. Thomas in the same place that in that authority "everything" is understood in the sense of accommodated distribution, that is, from everything that enters the mouth, something is expelled; which fits the intention of Christ the Lord, that those things which enter through the mouth do not defile a man, the reason for which is given, because everything that enters, if it defiles a man is by reason of what impurity it has, but this which has impurity is expelled, and thus everything that enters does not defile, because what can defile is expelled.

To the second confirmation I respond that there is no particular difficulty in nutrition, but the same proceeds in the generation of man, how the union of the soul to the body is corporeal. And we say this union is in no way spiritual, because neither does the spiritual substance itself become dependent on the body, nor is the unity of the whole composite itself that results a spiritual unity, but corporeal, just like the composite itself, whose unity it is, nor does it have a foundation in any spiritual change and action but in corporeal, because matter is disposed and applied through alteration to such a form, and thus if the whole change and dependence in which this union is founded holds itself on the part of the body or matter, it is entirely corporeal. But as to what is said, how if the whole soul is united to the body can it also be wholly united to other parts, I respond that the soul is virtually multiple, although indivisible in entity, and thus can be united wholly, but not totally, nor in every way in which it is communicable, nor explained in all the parts to which it can be newly communicated, just as we said above about the intension of forms in question 4.

Secondly you may object: To prove that even non-living things grow because fire, when combustible material is applied, and wine when water is mixed, convert those into their own substance by their own power, therefore nothing is lacking for them to be said to grow. If it is said that some conditions of growth are lacking, namely that the living thing grows according to all its parts, and that this happens through internal reception not through juxtaposition, against this is that even the first condition is found in non-living things, as when wine is mixed with water, all its parts are touched by the water, because all its power is weakened. The second condition is also not lacking, because stone, for example, or iron, and other metals receive some bodies within their pores, which are converted into them; besides the fact that this condition does not seem necessarily required for growth, for if local motion and alteration are true motions, even if they happen from without, why does growth alone demand to happen from within, and through internal reception? Hence St. Thomas in On the Soul II, lecture 8, openly says that among the elements only fire is nourished.

I respond that all these things are not sufficient for nutrition properly so called, although they suffice for improper nutrition, which in reality is generation and multiplication of something from matter joined to it, but accidentally, because the thing generated is close to the generator and becomes continuous with it, the inanimate thing seems to grow. But for proper growth, as distinguished from generative power, it is required that something be changed per se first, and converted in place of parts which have been lost from the very power internally consuming its own parts, and thus internally receiving to restore them. And this is not found in non-living things. Nor is it an obstacle that fire seems to lose something and acquire something, as when it is sprinkled with water or oil, those drops extinguish something of the fire, and again that fire converts the oil or water itself into itself. For I respond that this loss and acquisition happens because of mutual action and reaction, but not because of the special nature of nutrition, for this does not consist only in loss and acquisition which arises from the common nature of action and reaction, but from the fact that something acts on its own parts through its own power, and consumes them, and in their replacement converts something into itself through internal reception. Hence if in non-living things the conversion of something into their own substance is found, even if it enters within their pores (although it commonly happens through external juxtaposition) nevertheless this does not happen because of a restorative power of what is lost, but a generative power acting on whatever is brought near or juxtaposed to it, and thus in non-living things the generation of a nearby thing, even if it can be continuous with it, does accidentally what nutrition does per se and properly in living things. And although other motions do not always demand to happen from an intrinsic principle and power, growth nevertheless demands this, because it is a vital motion, and joined to nutrition, and ordered to the restoration of an intrinsic part which had been lost by its own power.

To the passage of St. Thomas we say he is speaking of improper and similar nutrition, such as happens through the generation of a thing brought near and able to be continuous with the generator, although this appears more in fire because of its stronger activity on matter placed near it. And St. Thomas did not say absolutely that fire is nourished, but that there is in it a similitude of growth and nutrition: and it seems to be nourished.

Distinction between growth and nutrition.

Regarding the second point proposed in the title of the article, there is a doubt whether growth and nutrition are really distinct motions and actions, such that growth, as it tends toward quantity, is a motion really distinct from generation. We dealt with this in Physics V, question 19, article 3, where we showed that there is per se motion to quantity distinct from nutrition. In the present, therefore, this distinction is to be explained more fully. And we suppose we are not speaking of growth in a broad sense, as it regards any increase in any genus, whether of quality or quantity, but specifically in the genus of quantity, and not of that increase which happens through rarefaction, but which happens through the addition of parts not only by juxtaposition, which in reality happens through true generation, but which happens specifically in living things through motion from lesser to greater quantity by intrinsic power. About this we inquire whether it is a motion distinct from nutrition, because the former tends to quantity, the latter to substance.

Many therefore deny that there is per se motion to quantity, induced by two principles. First, because they think that quantity always behaves as a proper passion of body, whether partial or total, and therefore does not terminate any action separately from the production of the body itself, because a proper passion is never produced by an action distinct from the production of the essence to which it follows, just as total quantity itself, when it is produced as following upon the first generation of substance. Second, because they think that quantity immediately inheres in matter, and thus when matter passes from one form to another, quantity also passes, therefore a distinct motion productive of quantity is not required, but an action uniting form to matter suffices, and consequently the quantity of one to the quantity of the other. Therefore they make growth a motion only per accidens, that is, by reason of the alteration joined to it, not per se and by reason of the quantity it produces: because this is not acquired, but is supposed in matter, and thus when one quantity is added to another, only some indivisible uniting them is produced, just as nutrition in us only produces the union of the soul to a new part of matter. Finally, Aristotle in this book On Generation, text 4, says: "Nutrition and growth are the same, but the concept is different."

A new difficulty is added from another source, because in our view substance in itself does not have parts, but only through quantity, as we taught in Logic q. 16, art. 1, and in Physics q. 20, art. 2, therefore substance as distinguished from quantity cannot terminate nutrition, since nutrition is not to the whole and entire substance, but to a part, and substance has this only through quantity, therefore there is not one action terminated to a part of substance, and another to quantity, because through that substance has the nature of part.

Nevertheless, the opposite opinion is common among philosophers, as Rubio testifies here in the treatise on growth q. 2, and the Carmelites disp. 5, q. 1. And indeed Aristotle perpetually teaches that growth is truly and properly motion, and is terminated to quantity, who named three species of motion, alteration, growth, and local motion, as is clear in Physics V, ch. 2 and in the Post-predicaments ch. on motion he numbers increase and decrease among other species of motion, and we also proved and defended this in Physics q. 19, art. 3. Now it only remains to prove that growth is distinguished from nutrition. Some prove this because the subject of nutrition is distinct, namely the matter of nourishment from which the new part of substance is made, and the subject of growth, in which quantity is placed. Others from the distinction of the primary term of each, because nutrition is to substance, growth to quantity. Others from the operation of nutrition, because nutrition can happen, and God can impede the resulting of new quantity, and thus nutrition will be separated from growth. But nevertheless these reasons are ineffective unless something is added, because they can be pressed in substantial generation itself, for form is produced in matter, but quantity and proper passions in the composite itself; similarly the distinct term is substance itself, and its proper passion in the nature of the thing produced; the resulting of a proper passion from nature can also be impeded when it is generated, and yet it cannot be denied that nature is generated and the consequent proper passion is produced by the same action, therefore similarly someone could say that partial substance in nutrition and partial quantity as something following upon it are produced by the same action, notwithstanding that they are distinct terms in entity and have a distinct subject, etc.

Therefore the conclusion posited is to be proved otherwise as we proved it in Physics q. 19 cited. And it is the object of growth speaking absolutely, but by reason of what is increased and growing, for which the production of a new part of substance which is nourished, and the quantity which follows upon it, is not sufficient, but quantity as superadding to the pre-existing, for which it is required that quantity be so acquired that more of it is acquired than is lost, and as regards this formality it is not a proper passion, but an accident, and it seeks to be made by a distinct motion, for this does not always belong to quantity. And hence a second reason is taken, because growth does not last as long as nutrition, for an animal is nourished as long as it lives, and in every nutrition just as a new part of substance is acquired, so also a new partial quantity; but growth does not last through the whole of life, for an animal does not always grow, although it is always nourished, therefore it is a sign that new nutrition is not sufficient for growth, nor the sole emanation of partial quantity, because this whole is found in every nutrition, and yet growth is not always found, therefore something more is required for growth than the emanation of partial quantity; but this is nothing other than regarding quantity as growing, as superadding to another, for under this aspect quantity is not a proper passion, nor is it made by the sole action of nutrition, but it requires a new action or change, for nutrition only regards a new part of substance, and consequently a new part of quantity as it emanates from that, but growth regards quantity as greater, for it is motion from lesser to greater quantity, but that formality of greater and lesser is not in quantity as a proper passion, but as something accidental, and therefore quantity as it stands under that respect and formality can terminate a new motion. And this reason proves that not only per accidens and by reason of alteration, but per se and by reason of quantity it can terminate motion, because it can found that formality according to the aspect of greater and lesser.

From which the formal term of nutrition remains explained, for it is not union alone, but the substantial form itself, not as in generation, namely as totally and newly introduced into the whole matter, but as newly applied and informing an inadequate part of matter. But nutrition is compared to aggeneration as something specific and particular to generic and common, because aggeneration is the sole acquisition of substance whether it happens in living or non-living things, but nutrition is only the vital acquisition of substance, just as generation commonly said is something superior to vital generation. But growth says for its formal term quantity as greater in the way explained and about to be explained.

To the opposing foundations we responded in Physics q. 19 cited, and we showed that although quantity in itself follows upon body partially or totally as a proper passion, nevertheless insofar as it is greater and as growing, thus it is not a proper passion, but requires a special change by which more of quantity is acquired than is lost. If you press: Because quantity as greater or lesser only adds the relation of greater or lesser, but there is no per se motion to relation, it is responded that quantity as greater formally imports a relation, and thus cannot per se terminate motion, but fundamentally it says some formality to which there can be per se motion, for thus it is quantity as to be joined to the preceding without so much or greater loss, for thus motion happens from lesser to greater quantity, which cannot be done through nutrition alone in itself, because although it always attains a part of quantity, it does not always acquire it with the foundation of increase and majority, that is, with the conjunction of new quantity without loss of the old. But what is said that matter is the subject of quantity independently of form, we entirely deny this, as will be shown below in question 9, for matter only behaves as the subject quo of inherence as the reason for receiving, not as the reason for sustentative actuality, nor does quantity follow bare matter, but by reason of the form of corporeity.

To the authority of the Philosopher it is responded from St. Thomas in the cited place On Generation, lecture 17, that Aristotle is speaking of nutrition and growth on the part of the matter about which they are concerned, because from the same nourishment someone is nourished and grows as long as growth lasts, but he is not speaking of growth and nutrition for the actions themselves, as if they were the same action or change, for diverse actions or changes can be concerned with the same matter according to diverse formality. Besides the fact that Aristotle frequently says some things are diverse in concept, that is, in essence and definition or formality, and thus it is understood in the present, but not in concept, that is, only through the intellect.

To the final difficulty we will speak in the following article.

ARTICLE II.
How is nutrition understood to occur in parts of substance?

This difficulty arises in our view, which we presented in Logic q. 16, art. 1, and in Physics q. 20, art. 2, that it is not proper for substance to have parts formally, except through quantity, but from itself only radically, and yet it is clear from what has been said that nutrition is formally terminated to substance not total, but partial.

In the present, therefore, the foundation that we laid in the cited places must be briefly recalled. We deny parts formally to substance itself, and only grant them to it radically; but through quantity we say parts are formally constituted in being and in the formality of part, because the formality of part requires divisibility and ordering, by which one is placed outside another and adds something to another, for if it is within it and not coordinated and outside, it will remain penetrated and confused with it, whence all parts will be reduced to a lack of divisibility, for something cannot be divided except by taking one and leaving another, but where all things are confused and penetrated within others, one is not taken without the other being removed. If therefore substance before quantity had parts under the formality of parts, that is, as ordered and divisible in relation to itself, although not in relation to place, and had this substantially and not through any accident, it would be necessary that those parts be united substantially not in their entirety, but by extremities or indivisibles. But if they are united through indivisibles, then substance has a sufficient principle of impenetration by the force of the substantial union of parts, and thus quantity is superfluous, since it is proper to quantity to extend parts by resisting penetration, not actually indeed, because by Divine power two quantities can be penetrated, but according to aptitude, just as an accident seeks to inhere aptitudinally. The consequence is proved, because if in substance before quantity they were united with the formality of parts, which is ordering and divisibility in relation to itself, therefore without confusion and they are not united in their entirety, for confusion is opposed to ordering, therefore no part however small is within another, nor is it united to another in its entirety, therefore it ought to be united through something indivisible, or by an extremity, because if through something divisible, something of it would be within the other, therefore if it is entirely outside it is united through something indivisible. If therefore substantial indivisibles are given so that parts may be ordered among themselves and not be penetrated nor united in their entirety, therefore they have in themselves a sufficient principle of resisting penetration both among themselves, because they are not united in their entirety, and with a contiguous and nearby body, for it does not stand that something resists the penetration of parts among themselves lest they be confused, and does not resist a contiguous body lest it be penetrated, for what suffices for the impenetration of continuity suffices for the impenetration of contiguity. And especially because if a substantial indivisible continuative of parts is given, a terminative will also be given, so that in it may be subjected the terminative indivisible of quantity, because in this view it cannot be subjected in parts, therefore just as the continuative indivisible of substance makes it so that the continued parts are not penetrated among themselves, nor united in their entirety, so the terminative indivisible of substance will make it so that it is not penetrated with another contiguous body, but the terminative indivisible remains next to the indivisible of the other body, which is not to be penetrated, nor joined in their entirety.

You may say: Therefore material substance as regards that which is of substantial entity is whole under the whole quantity, and whole under a part: but this is not against the formal effect of quantity itself, because quantity extends the parts of substance and orders them one after another, therefore it makes it so that a part of substance is under a part of quantity, and the whole under the whole. But the consequence is proved, because if it is so that a part of substance corresponds to a part of quantity, and not the whole to any part, therefore already on the part of substance, and as regards that which is substantial, there is given a distinction of part from part, which cannot formally come from quantity, because quantity is an accident, but that aspect of parts of substance in substantial aspect is not accidental: therefore the foundation brought forward is overturned, that substance does not have substantial parts from itself, since with quantity subtracted, it has not only accidental parts, which are of quantity, but also substantial ones corresponding to them.

I respond that in this there lurks an equivocation, and there can be a difference in the way of speaking. For it is necessary to distinguish what substance has according to itself with quantity removed, what it formally has through quantity, what finally it exercises substantially, with quantity supposed however as a condition. For substance according to itself, and with quantity removed, does not have the formality of parts, because the principle of dividing and distinguishing parts as ordered, and under the formality of ordering, by which one is outside another, is removed. But from quantity itself formally only accidental distinction of parts is had, because the formal effect cannot exceed its form. But from substance itself with quantity ordering and distinguishing accidentally placed as a condition, there results a substantial union of parts thus ordered, just as when division is made through quantity, from matter itself there results incommunicability and substantial individuation, as we will say below in q. 9. But the reason is that if with the division of quantity placed they differ not only accidentally but also substantially, otherwise Peter and Paul would not be two individuals substantially diverse, therefore when continuity and union of quantity to quantity happens, parts are also united substantially, otherwise that composite of parts would not be one substantial whole, but would be two substantially and one accidentally, and thus when an individual is increased, it would not remain the same individual substantially, therefore it is necessary that with the unity of quantity between parts supposed, a substantial union also happens between the parts themselves, so that that individual is substantially one. Hence St. Thomas in III, dist. 13, q. 2, art. 2, quaestiunc. 2, says: "That in a natural body a threefold union of members to each other is found. The first is according to conformity of nature, because all members consist of the same similar parts and are of one nature, like hand and foot from flesh and bone, and thus members are said to be one as in genus or species. The second is through their binding to each other through nerves and joints, and thus they are said to be one by continuation. The third is according as vital spirit and the power of the soul is diffused through the whole body. The fourth is according as all members are perfected by the soul, which is one in number in all members." See how St. Thomas in members themselves which are indeed integral parts distinguishes union by way of continuation, which is without doubt of quantity, from union which is according to conformity of nature, which is union of substance, since in substance parts of nature are conformed. Similarly in the question on the Soul, art. 10, ad 16, he says: "That the soul is the substantial form of the body giving being and species to the whole and to the parts, and the whole constituted from parts is one simply," and he speaks of the integral parts of the body itself, about which the argument proceeded, and he was speaking in the article. Therefore St. Thomas thinks that the parts themselves are united substantially, and as united extremes constitute a whole making one simply, which indeed is substantial.

From which it is gathered that parts which come in nutrition or growth do not become one substantially through identification of one part with another, for those which are physically identified cannot be separated unless identification is removed, but this cannot be taken away through removal of union and composition, since it is not given in that view; nor through removal of some mode, because that identification is not of a thing with a mode, for no mode in substance comes through the coming of parts, for what is this substantial mode? Therefore modal identification in substance cannot be given. But if the reality of substance is identified why will it not be able to be separated, and one taken away without the other being taken away? But if they can be separated, as in fact they are separated, identity is not given, but true composition in one being, as between matter and form, which can be separated. But in integral parts separation happens also substantially, as when parts are divided and diverse individuals result, therefore when they are joined, they were not identified, but united, because separable, nor one through identity, but through composition, for the unity of identification does not add over the unity of composition except that the latter is from separable extremes, the former lacks extremes, and so does not have anything separable, but the same. And it is remarkable that when matter and form compose one they are not identified, but united, and yet they are essential physical parts, but integral parts are not united, but identified, although St. Thomas says they are ordered to constitute one whole in the question on spiritual creatures, article 4, ad 14. Therefore when addition of parts is made, and distinction of them according to quantity, substantial union also happens between the parts themselves thus quantitatively distinguished and continued just as when division and separation is made, substantial and not only accidental distinction also happens between individuals.

Nor is it an obstacle that sometimes the holy doctor seems to assert that some forms or natures have this totality of parts per accidens and by reason of quantity, but by reason of essence or substance the whole is in the whole and the whole in the part, as is clear in the First Part, q. 76, art. 8 and Against the Gentiles II, ch. 72, and often elsewhere, indeed in III to Annibald, dist. 21, art. 1 ad 4, he says that in the division of the continuous an entirely new body is not made, although one is divided into many. I respond that the sense of St. Thomas is that the whole form and substance is in any part, if it is taken according to the mode of substance without quantity, but with distinction of parts placed through quantity, St. Thomas does not deny that substantial union and composition happens, but not identification alone, just as substantial diversity also happens if division is made through quantity. And when he says that in the division of the continuous an entirely new body is not made, although one is divided into many, the sense is manifest that a new body is not made by newness of generation from matter, but well by newness of multiplication and division of body, because now those are placed in act which before were in potency many, and one in act. Therefore before division they are not many in act by plurality of existence and diverse being, they are nevertheless many substantial parts by plurality of extension and continuation, which is formally made through quantity itself ordering parts and continuing them, but with that continuity placed, substantial union happens between the parts themselves insofar as with distinction made through quantity, that substantial entity which is subjected to a part of quantity is inadequately compared to the substantial whole, and is divisible and separable from it, and because of this needs to be united and compose with another entity joined to it, and this is for union to be given, and not identification between substantial parts, with distinction made through quantity supposed however.

From this moreover it is clear to the argument, on occasion of which all these things have been said, namely how through nutrition a part of substance is acquired, since it has the nature of part from quantity. For we say that through nutrition a part of substance is acquired, but nevertheless affected by quantity, and so from quantity, by which it is affected it has the formality of part; but from itself it is only radically a part, and through nutrition formally and directly the formality of part, which is quantity, is not acquired, but the entity of substance inadequately relating itself to the whole, which is radically a part, and is subjected to that quantity, from which it has the formality of part and again through nutrition that entity which has the formality of part according to quantity is drawn to the being of the whole through true and substantial composition and union as an entity inadequately participating in the being of the whole, and consequently not as whole, but as composing the whole by substantial composition, although it has coordination and the formality of part through quantity. And so just as generation directly produces total and individual substance although in the nature of division and designation it depends on quantity and under it is individuated, so aggeneration or nutrition directly regards partial substance, although the formality of part depends on quantity ordering and continuing parts, just as individuation depends on quantity as dividing and separating. More on this can be seen in the cited place of Logic, q. 16 and Physics q. 20.

ARTICLE III.

In which action does nutrition formally consist, and where does the nutritive faculty reside?

It is certain that multiple actions contribute to nutrition and growth, some of which are preparatory, others consummative; just as in the generation of animals many actions precede, not only preparing but also generating intermediate forms, until the final one is reached in which the animal itself is generated. Since nutrition aims to convert food into the substance of the one nourished, and food is initially very dissimilar, it requires many alterations and digestive processes until it is assimilated to the living being itself and converted into its substance. Similarly, since the substance of the animal has so many diverse parts which require different changes of food - as flesh is nourished differently from nerves, bones differently, blood is made differently from spirits, and semen differently - various actions are necessary by which food is distributed and nutrition takes place.

Briefly (since this matter pertains more to physicians), we will outline the changes required in food until it is totally converted into solid parts. Thus, before food sheds its inanimate form and takes on the form of a living thing, two changes precede: one in the animal's mouth, another in the stomach before it passes into the form of blood. In the mouth, change occurs through chewing and grinding food, while alteration happens through saliva itself and the moisture of the mouth, which are very effective in altering food, as Galen teaches in book one of On Simple Medicines, chapter six. In the stomach, which has a nervous, membranous substance interwoven with fibers so it can easily contract and expand, food brought down through the throat is gathered and warmed by the stomach's heat, as things are cooked in a cauldron over fire, until from the food placed there a certain liquid mass is made, which is called chyle and is white in color. There the impure and coarse parts are separated from what is more purified, and that more refined juice is carried through certain veins called mesenteric to the liver, to be transformed into blood there. What is thick and excretory is pushed to the intestines to be expelled.

When food in that liquid form is brought from the stomach to the liver, it passes into blood there, cooked and purified by greater power and heat. This cooking could not happen in the stomach because it requires greater heat and power to be more purified in passing into the form of blood. In that blood mass made in the liver, three other humors also appear, namely yellow bile or choler, black bile or melancholy, and phlegm, about which Galen can be consulted in book II of On Natural Faculties, chapter nine, and book four of On the Use of Parts, chapter three. Whether blood takes on the form of a living thing, though it still serves as proximate food for solid parts, we will discuss shortly.

From the liver, there is a multiple and varied distribution of both blood and other humors to various parts of the body and receptacles. For first, nature separates choler and melancholy, which are not suitable for nourishment, and sends choler to the gallbladder near the liver itself, melancholy to the spleen, while phlegm is mixed with blood throughout the body and veins, because it easily changes into blood. If black or yellow bile is not separated but is likewise involved with blood through the veins, illness and bad disposition of the animal arise from there. Another humor is separated from the liver, which becomes urine, because that humor descends from the stomach with the white mass or chyle, as if its vehicle, and because it no longer serves when that mass is converted into blood, it overflows into urine and is expelled. I know some deny that all four humors are made in the liver, but only blood, to which the liver's condition is related, being of the same color. However, what we have said is commonly held by the school of physicians with Galen in book II of On Faculties, chapter one, both from experience, because all four humors are found together in the liver before the mass is separated; and because the power in the liver, just as it has the efficacy to convert the material supplied to it by the stomach into blood, so also into the other humors, which are not of greater perfection nor require greater cooking.

The blood that serves to nourish the animal is distributed from the liver in two ways: part is drawn to the heart where vital spirits are formed, which are the purest and most delicate blood, and to the brain, where animal spirits are generated, which serve the functions of the sensitive part and the operation of the senses. Part is derived through veins which pervade the whole body with various small branches to serve its nourishment. And first, blood is drawn by suction from the veins themselves, then by the adhering parts through pores; it is also aided by phlegm itself, which is carried with blood so that it flows through the veins and throughout the body. And finally, blood placed in the pores passes from liquid form to solid, whether into flesh or bones or nerves and the like; and then the whole nutrition is consummated, because the solid part no longer serves as nourishment, but is only the nourished part; blood, however, although it is a part nourished from external food, still serves as internal food for the solid part to be nourished.

Finally, blood drawn to the heart is cooked with greater power, so that it becomes very pure, and vital spirits are made, required for pulsation and for the functions of life, because vital heat principally resides in them, since heat could not be derived from the heart except through some liquid or humor in which such life-giving heat would reside; and just as that heat is purer and more vivid, as coming from the very principle of life, so it greatly purifies and attenuates the blood itself, so much that spirits vanish in a dead animal because of their thinness. Similarly, because the brain is the principle of sensitive life, blood brought there through veins is greatly purified, and animal spirits are made, by which the heat required for sensing is carried to the senses and nerves, and in these spirits images or species reside, since when the animal is sleeping, through the movement of spirits, various forms are offered which produce dreams. I know Aristotle thinks that blood is not formed in the liver, but in the heart, and that spirits, both vital and animal, are made there, because he thinks the heart is the principle of sensitive life. However, physicians believe the workshop of blood is the liver, and that both it and the other three humors are formed there, because it already has a red color there, and from there is distributed through veins, in which true blood is found. In the heart, however, not blood absolutely is generated, but the purest which are vital spirits, while in the head animal spirits are made. This is enough to have briefly touched on for understanding the artifice of nutrition. More on these matters can be seen among physicians, and in the Coimbra Commentators on chapter five of On Generation, question three; Rubio in the treatise on growth, questions one and seven.

These things being established, it remains to explain whether nutrition formally and properly consists only in that final conversion by which internal food is converted into solid parts, or also in that conversion by which external food is converted into blood and humors, which depends on that famous question of whether blood is informed by the soul itself, or is only nutritional humor, from which it is also deduced in which part the nutritive faculty is as in a subject. How nutrition happens in the pores themselves, and the emission of other humors, we will discuss below in article five.

TO THIS QUESTION, THEREFORE, I SAY FIRST: Nutrition is properly and formally found where food passes into a solid part, so that it no longer remains food but nourished, though imperfectly and incipiently nutrition is found in the formation of blood and humors itself, according to the opinion we will soon approve, that blood is animated. Thus we should speak of nutritive action as of generative action in living things, for just as generation is not perfected by a single action, but by many which pass through various forms until the last, in which generation is consummated with the final form introduced, as St. Thomas explains in De Potentia q. 3 art. 9 ad 9, for it is clear that first the matter of seed and blood is disposed, and members are formed, and the form of the embryo is introduced, and finally the form of the perfect animal; so in nutrition, food is first transmuted by various dispositions and takes on different substantial forms, for the same substantial form that was in bread or other food does not remain in the liquid mass made in the stomach, and much less in blood. Specifically, since nutrition essentially must happen from food, it is necessary that nutrition be consummated where food is consumed and passes into the nourished thing, and it passes into that when it no longer remains nourishment, for if nourishment remains, it is not yet fully nourished but nourish-able, and something remains to be transmuted for it to be purely nourished, therefore nutrition is consummated where solid parts are made, because solid parts are so nourished that they no longer nourish nor serve as nourishment, while blood, if it is nourished, can still further be nourishment.

From this it follows that the nutritive faculty, according to the various functions it exercises, must be placed in different organs or parts. Indeed, the natural faculty, for that part by which it makes blood, which is so nourished that it is also nourishment for solid parts, is in the liver, because there is the formative power of blood. But the formative power of spirits and nutritive of them is in the heart, because spirits are formed there and distributed from there. Similarly, the nutritive faculty of animal spirits is in that part where such spirits are formed, namely in the brain, as we said above. Finally, the natural faculty which converts moist substance, namely blood, into solid parts, is diffused throughout the whole body and in the solid parts themselves, which act on blood or other humor placed in the pores, and from there coagulate it into a solid part, just as flesh is nourished from blood placed in the pores, and other solid parts, like bones, nerves, cartilages, and other similar things from food proportionate to them.

I SAY SECONDLY: It is more probable that blood and spirits live and are informed by the form of the animal, at least as to the vegetative degree. We distinguish only that double blood, of which the first is nutritional and has a true form, for if any other is found more imperfect than that, it is not true blood, but humor not fully cooked, though somehow mixed with blood and tinged with its color. Some deny this conclusion, thinking that blood, even spiritous, does not live, but is in the veins and body like water in a vessel. So say the Coimbra Commentators in chapter 4 of this book, question 24, article 2, with many others they cite, and Rubio in the treatise on growth, question 5. And it is based first on Aristotle in On the Parts of Animals II, chapter 3, who says: "Blood is not continuous with flesh, nor cognate, but is contained in the heart and veins as in a vessel," and in History of Animals I, chapter 19, he says: "The blood of all animals pulsates within the veins, and the pulse moves simultaneously everywhere." Second, because blood is something liquid, therefore it cannot be continuous with a solid body, but contained in it. Third, because blood is food for solid parts, therefore it cannot have the same form as them, since it is of the nature of food that it be converted into the substance of the nourished, therefore it passes from one form to another and consequently does not have the same form as the thing nourished. Finally, we see that when blood is emitted from a vein outside the body, what flows outside is continuous with what is in the vein, but what is outside is not animated, therefore neither is what is inside.

Nevertheless, the opposite is more probable and more in conformity with St. Thomas, who holds that blood pertains to the truth of human nature, and therefore counts it among the other parts that will rise again in man as parts of human nature, as is clear in the Third Part, q. 54, art. 2, and Quodlibet 5, and in IV Sent., dist. 44, q. 1, art. 2, where he excellently distinguishes concerning blood or humor, insofar as it is in a state of transmutation from the form of humor to the form of a member, and in this state it will not rise again, but in itself as it has a determinate form without a state of transmutation, thus it will rise again. When St. Thomas says in the Third Part, q. 31, art. 5, ad 1: "That blood is not actually a part, but only potentially," he immediately explains himself, that blood is potentially flesh, for flesh is made from blood, and so blood is not actually such a part. And when in the First Part, q. 119, art. 1, ad 3, he says: "That nutritive moisture has not yet arrived at receiving perfectly the nature of the species, but is on the way to this, like blood," Cajetan there rightly notes that St. Thomas did not say absolutely that it does not participate in the nature of the species, but that it does not participate perfectly, and so it is not concluded that it is not an animated part, but that it is not a perfect part like a member or flesh. St. Thomas's disciples commonly follow him: Cajetan in the cited places, and Master Bañez in I De Generatione, ch. 4, q. 13, art. 5. And Aristotle stands for the same opinion in the last place recently alleged for the contrary opinion, where he expressly says that blood is animated and boils, therefore he thinks it is so contained in the veins that it is also animated by the soul. And the reason is that blood participates in the accidents of life, for it has heat, indeed it is the vehicle of heat, it also increases and grows, as we experience daily, and it moves throughout the whole body; it also pertains to the truth of animal nature much more than nails and hair, which nevertheless are informed by the same form of the whole, though not to the same degree, because they do not sense; therefore there is no reason why we should say that blood is not informed by the same soul, though not to the same degree. Likewise it is a great inconvenience that something should contribute to constituting one body and nature, which is one being simply, that is not informed by the same form, and consequently is not continuous but contiguous with another, for thus from blood and from other parts there would not arise one being per se, but one being per accidens, namely composed of diverse discontinuous things, but the nature of an animal is one as one being simply, therefore blood does not pertain to the truth of human nature, because it does not pertain to its unity simply. Nor does it suffice to say that blood is a part neither integral nor essential, but as something necessary for preserving life. For however it may be called, it is not informed by the same form of the whole, nor is it continuous in the same supposit, but only aggregated to them as a distinct thing, therefore it does not compose one being simply with the other parts, and consequently does not pertain to the truth of such a nature, because it does not compose or constitute it, but will be like dispositions, which are also required for preserving life.

But you may ask whether when we say this about blood, it should be understood of other humors, and also of milk and semen, and by what life they are said to live. It is answered that all these humors, which are generated with blood or from blood, are informed by a vital form, for they have the accidents of life and are nourished and increased as is clear concerning milk and semen, which increase and participate in vital heat as long as they are within the animal, and similarly concerning choler and phlegm, which pertain to the integrity and composition of the animal body, which is composed no less of four humors than of four elements.

Nor is it an obstacle that St. Thomas says in the First Part, q. 119, art. 2, that semen is not informed by a soul, and teaches the same in De Potentia q. 3, art. 12, and similarly in IV Sent., dist. 44, q. 1, art. 2, q. 5, he teaches that milk and semen will not rise again in men.

This is not, I say, an obstacle, because the sense is that semen is not informed by a soul perfectly, like flesh and the other members, but imperfectly and with a tendency to further information or formation, because semen is in potency for flesh and the members of the fetus to be made from it. And so in that degree and respect in which blood is said to be informed by a soul, though parts are nourished from it and members are made, semen also pertains, though the fetus is formed from it, for St. Thomas says in II Sent., dist. 30, q. 2, art. 2, ad 2: "That blood is in some way said to be of the substance of the generator, and much more semen which is produced for further digestion." Wherefore if in St. Thomas's opinion blood is informed by a soul, though not according to every degree, a fortiori semen, otherwise it would not be verified that the generator generates a son from his substance, if semen is not his substance, but a distinct supposit, like water in a vessel, so that it is not cut off from the whole, which is not continuous with it. But nevertheless it should be noted that just as in blood is considered both the substance itself of blood, which is informed by a soul, and its state insofar as it is in transmutation and on the way to nourishing and forming a member, namely flesh or bones, and in this state it will not rise again in men, because it is a corruptible state, not of the integrity of nature, so neither will semen and milk rise again, because they are humors only serving the state of generation and corruption. Hence we see that without them the truth of human nature is preserved, as in boys there is no semen, all their nourishment is necessary for them to grow their body, and in those who have not given birth, there is no milk, but this is not an obstacle, because even without a hand or foot human nature is essentially preserved, and yet it is informed by the same soul and pertains to its integrity. However, semen that is cut off and milk that is emitted lose the actual information of life, because they are discontinued from the living thing, but we are speaking of them as long as they are conjoined and not emitted.

When it is asked by what degree of life these humors are informed, it is answered that they are informed by an imperfect degree of life, namely vegetative, because they do not sense like nails and hair, but grow and are nourished, and so blood, when it is extracted, does not hurt, just as hair does not when it is cut. Wherefore St. Thomas, in the place recently cited, ad 3, says: "That humors are of the perfection of the human body, like other parts, although they do not arrive at the whole perfection like other parts. For as all parts of the universe consequently obtain perfection from God, not equally, but each according to its mode, so also humors are in some way perfected by the rational soul, yet not in the same way as the more perfect parts." This place is most manifest for our opinion, for they are not perfected by the rational soul except as by a form.

To the foundations of the opposite opinion it is answered by noting the opinion of Cajetan in the First Part, q. 119, art. 2, which he took from St. Thomas, dist. 44 cited, that in blood and similar humors there is a double respect or office, for they both have the nature of an integral part, though less perfect, and have the nature of a way and tendency to more perfect things which are formed from less perfect ones, just as elements in the world are compared to mixtures, as less perfect bodies from which mixtures are formed, yet they are parts of the universe though less perfect. And in a quantitative whole, a line and surface are truly parts in their extensions, yet with respect to depth or body they are terms or indivisibles, so it is not repugnant that something which is absolutely a true part in the body, yet comparatively to other more perfect parts, is matter from which they are formed, and so blood is an imperfect part and providing matter, from which other solid parts are formed. Which in another way can be distinguished concerning blood, as to substance, or as to the state of transmutation from liquid to solid, and in the first way it is a part in itself, in the second way it is serving a more perfect part.

Thus therefore we say to the authorities of Aristotle, that blood is within the veins like water in a vessel as to the nature of liquid, but nevertheless as animated liquid, because as Aristotle says there, blood is animated and boils in the veins. Nor is it an obstacle that sometimes blood is exuded like sweat and excrement. For he answers that either that humor is not perfect and cooked blood, but still formless, though tinged with the color of blood from too much relaxation of the body, by which that humor is mixed with blood and tinged with its color; or if true blood is shed, this happens either from rupture of a vein, or from too much relaxation of the pores in which blood is contained, not because it is in itself excrement.

To the first reason it is answered that although blood is a liquid substance, it can nevertheless be continuous with other members through fibers, which appear more manifestly in the bodies of animals having thick blood, as in bulls. Likewise it is continuous with other members in its principle, namely in the liver and in the heart, where blood is cooked, and there it has the information of the soul and is continuous, though, because it is liquid, it is said to be in them as in a vessel. Thirdly, it is continuous in the pores with more solid members, insofar as it gradually coagulates and solidifies with them. Nor is it inconvenient for a solid part to be continuous with a coagulated part, and a coagulated part with a liquid part, just as milk while it congeals on one part is continuous with another liquid part, and a part of frozen water with another part still liquid. As to what is added about blood when it is emitted from the veins, and about milk when it is expressed, and about semen when it is ejaculated, it is answered that such humors emitted outside are not continuous, but cut off, and so although they seem to be continuous, the blood which is in the vessel, and which is in the air, and which is in the vein, there however when it bursts from the vein, it is corrupted and loses life, and takes on another form, like a corpse, though it retains something of heat or similar power. Nor is this surprising, since even a withered member seems to be continuous with a healthy one, and a dry branch with a green one, and yet they are not continuous but contiguous, because they have different forms. Blood is discontinued because the fibers, which are very thin, are broken, and thus it falls from the vein and is changed into another species and form, like a corpse.

To the second foundation it is said that blood is intrinsic and cooked nourishment, not extrinsic. It is not inconvenient that nourishment in its ultimate cooking be informed by a soul not as to the perfect degree, but as to the vegetative, but it passes into the form of the solid member which it nourishes, not by taking on a new form, but a new degree and a new mode of substantial information. And when it is urged that then the ultimate nutrition, by which conversion into a solid part happens, will not be a substantial change, because it is not from privation of form to form, it is answered that it is a substantial change perfectly and consummatively, and from privation of perfect degree to perfect. But in order that there be found there a transition from privation of form to form, the whole collection of changes must be taken from the change of food or nourishment, from the third change up to the ultimate change into the form of flesh, where there is the ultimate intended term, though because it happens gradually, when it is in the ultimate completion there is no longer a change from form to form, but from a prior degree of form to the ultimate, or into a perfect and substantial mode of informing, which can also be called a substantial change.

ARTICLE IV.

Whether augmentation while it lasts, and nutrition throughout the whole of life, are successive and continuous?

There is a twofold controversy concerning the continuity of these motions. First, whether they last continuously, that is, for the whole time of life. Second, whether they are continuous and successive motions, that is, not discrete nor instantaneous, but divisibly and through parts are continuous; and again, whether if they are continuous through parts, they have regular continuity, that is, that if so much is acquired in so much time, half is acquired in half the time, and a quarter part in a quarter part of the time, or rather irregularly, as when a stone is hollowed out by falling drops, so that a part of the stone is removed in this time, yet in half the time half the part of the stone is not removed, but is disposed during that whole time, so that in the last moment it is removed.

As to the first, two things seem certain. First, that nutrition properly speaking, and unless some accidental impediment obstructs, lasts for the whole time of life after the first instant, and after a little time which is required for food to be applied and disposed so that it can be converted into the substance of the nourished thing, in which time however alteration begins, and disposition for converting the food, and thus nutrition is already incipiently. Second is that augmentation does not last for the whole time of life according as it is distinguished from nutrition. The first is proved and explained from Aristotle saying in this first book: "As long as the animal remains safe, even if it undergoes decrease, it is nourished, but it does not always grow," where St. Thomas can also be seen, in lecture seventeen. And it is explained thus, because it is not necessary that nutrition so last for the whole time of life, that if in any even very brief time it is not given, the animal perishes, but that there is always need of food and nutrition, as long as the animal lives, so that in no state of life is a term naturally placed to this need, just as naturally a state and term is placed to augmentation, so that it no longer grows. But if it ceases for some time, either due to illness and debilitation, or due to lack of food, the animal will not immediately perish, but it will begin to be in a state of corruption. The reason for this perpetual necessity, besides daily experience, is taken from the very temperament of living things, which consists of hot and moist, and the heat must be abundant, because the functions and operations of living things are ministered by heat; but heat, because of its sharpness, acts on the moist and consumes it, as we see in fire, which is preserved by wood or oil or other combustibles, and so if the moist itself in living things is not restored, it will also vanish. And therefore, because heat continuously loses from the substance of the moist, if it ought to last, it is necessary that it continuously convert external food into its substance, and the intrinsic food itself if it is not continuously sustained and nourished by the extrinsic, will shortly perish. And this is the reason why nutrition lasts for the whole time of life, because for the whole time of life something is lost through heat consuming the moist, and consequently what is lost needs to be repaired. But because heat does not always act equally on the moist, nor is there always the same disposition of heat or moist, nor application of food, in this there is latitude, and sometimes interruption, though the animal does not immediately die, but begins to be disposed to die if food is lacking. Hence also is gathered the reason why some animals are said to live for some times without food, like dormice, bears, some serpents, and if there are any similar ones (if the histories are true), for this is because although they do not receive external food, they nevertheless have some internal thicker humor or phlegm, which at that time is cooked by natural heat in place of food and because of defect of heat they consume it slowly and gradually. But if some men are said to have lived for many days or years without food, either this is fabulous, or it did not have a natural cause, but either through a true miracle, or some foods were ministered by a demon, or they secretly ministered to themselves, or because of some weakness of natural heat, they consumed so little that they seemed not to eat.

But that growth does not last for the whole time of life is manifest from experience, and is asserted by Aristotle in the place recently cited, and in On the Soul III, text 59, and by St. Thomas on the same places, and in the Second Part of the Second Part, question 147, article 4, ad 2, and in II Sent., dist. 30, q. 2, art. 1, ad 5, and in the First Part, q. 119, art. 1, ad 4. That semen is not informed by a soul, and he teaches the same in De Potentia q. 3, art. 12, and similarly in IV Sent., dist. 44, q. 1, art. 2, q. 3. And the foundation is deduced both from the continuous reaction by which food itself acts on natural heat, since it weakens and diminishes it, but deficient heat cannot convert as much from food as it loses; and thus the animal cannot be increased: for increase comes from the fact that more is acquired than is lost; and also because what is acquired, since it is extraneous, also impresses its qualities on the nutritive moisture, what comes anew is not as pure as the first radical moisture: for wherever there is mixture of the extraneous the power is not so purified, but through the mixture itself it languishes and is changed; and consequently that power is left less conducive to increasing, because mixed and extraneous power can less unfold itself and increase than strong and pure power; and finally, because if living things were always increased they would acquire so great a quantity that they could not be informed by a single soul and vivified by one heart, unless its power were also increased and strengthened, whence the more an animal lived, the longer it could still live according to nature, because it would have greater power.

But you will object: Because if natural heat is weakened through continuous reaction of food, and therefore converts less of food, it also consumes less of moisture, for in the same heat is founded that it consumes of its own and acquires from another, and consequently it is not well inferred that increase ceases because it loses more than it restores, since for that reason, that it does not restore because of weakness of heat, neither does it consume. Second, because we see that a youth has stronger heat and better cooks food than an infant, and yet an infant increases, not a youth, therefore this reason is badly founded on strength and perfection of heat. Third, because new matter being added, new heat is added to the living thing, therefore also new power, therefore when an animal is increased power does not decrease but is increased, but diminution happens from debilitation of power, but it is not debilitated, but grows with the growing subject, and thus in any nutrition, when a new part is generated to the pre-existing, new increase and new power will also come to it. Finally, because an animal could be sustained by food of easy digestion, when it would come to the term of increase, and then it would more easily convert such food than it would lose from its own substance, therefore then it would increase.

To the first it is answered that weakened heat consumes less of nutritive and adventitious moisture, yet it is presupposed to have consumed more of the radical when it comes to that state of heat weakened by age. But concerning adventitious moisture, the less it is consumed, the more the animal is weighed down, and thence rather diseases are generated, and finally the animal dies. Similarly the more heat is weakened, the more difficultly it cooks extraneous food, because it is more dissimilar and thicker, but it more easily consumes its own moisture and its parts, for they are of easier evaporation by natural heat. But in the time when increase lasts, because the substance is still purer and the radical moisture, consequently vital heat is more virtuous and purer, and therefore can convert more from food than lose from its own substance.

To the second it is answered that heat in a youth is stronger quasi accidentally, not quasi essentially, that is, entitatively and in the nature of heat it is stronger, but not vitally or animally, because it is not so pure because of mixture of the extraneous, although because of greater solidity and density of the parts of the body, and plurality of parts heat in a youth is stronger and more vigorous, and operates more actions which demand greater strength. And because adventitious moisture is less consumed by heat, and renders it more impure, therefore neither does it lose so much from this moisture when adolescent or infant, nor however does it acquire more of increase. Nor is it an obstacle that sometimes when the state and age of increase ceases, the animal grows fat which also pertains to increase, for it grows in breadth. But it is answered that an animal is not said to be increased unless when it grows according to length so that bones and more solid parts become of greater quantity, but that increase in fatness alone or flesh, even if it is diffused in breadth, and much more if it only grows in some more swollen humor, is not increase simply and as to all parts of the animal, but only in a certain respect and as to some part, namely as to flesh or humor, etc.

But whether teeth always grow, Aristotle affirms in On the Generation of Animals II, ch. 4, and at least they do not decrease, because on account of the necessity of grinding food nature provided that they not decrease by continuous attrition, but their defect is supplied from elsewhere, otherwise they would totally fail to the detriment of the animal.

To the third it is answered that heat coming anew in acquired matter is not of the same purity and efficacy in the nature of vital as the first innate heat in which the living thing is generated, although because of thickness and solidity it is stronger, like heat in glowing iron, but not according to vital force, for in this it is more and more weakened by continuous reaction, action, and repassion, for the perfection of vitality does not consist in any heat whatever, since if it grows too much, the animal rather perishes. That temperament of vitality therefore is never found so perfectly in acquired matter as in the first innate and generated.

To the fourth it is said that food however delicate or of easier digestion is always more impure than radical and innate moisture itself. Hence although from this life can be extended, if moisture is rendered impure from less thick and undigested food, yet finally it will be consumed, because something of impurity is mixed, and only the radical moisture of the tree of life was to reduce to that prior purity.

Concerning the second difficulty, namely whether nutrition and augmentation are successive and continuous motions from the time when the animal begins to be nourished, some think that it is not a continuous nor successive motion. Which opinion Toletus follows in the book On Generation q. 11 and Pomponazzi in the book On Nutrition and Augmentation ch. 19 and others, and it is proved first from St. Thomas II-II, q. 24, a. 6, where he says: "Bodily increase in animals and plants is not a continuous motion, namely so that if something is increased in so much time it is necessary that proportionally in any part of that time something is increased as is continuous in local motion, but for some time nature operates disposing to increase, and increasing nothing in act, and afterwards produces in effect that to which it had disposed by increasing the animal or plant itself in act." Thus St. Thomas.

Second, it is proved by a difficult reason, because if nutrition is a successive and continuous motion, it follows that the nourished substance begins through the last non-being, and the substance of food ceases through the last being, but both repugn the mode of beginning and ceasing of substance. The consequence is clear, because successive motion does not begin in an intrinsic instant, because in an instant succession is not given, and thus it is not true to say, now it is, which pertains to the first being, but now it is not, immediately after it will be, which pertains to the last non-being. Similarly when at the inception of nutrition food ceases, because as long as there is not nutrition, food is not converted; if it is true to say now there is not nutrition, and immediately after there will be, it will also be true to say, now there is food, and immediately after there will not be, therefore food will cease through the last being. But the minor is proved as to the first part, both because every substance begins through the first being, as we said in Physics VI, for substance as increased consists no less in the indivisible than as first generated, nor does it proceed less from privation to form, which is to lack latitude, nor does it less require determinate quantity, and thus cannot be introduced in any smallest. Then, because if in some instant it is true to say, now there is not the form of the living thing in food, and immediately after there will be, either in that instant there is complete and ultimate disposition, or not; if there is then also form, because ultimate disposition is not without form; if not therefore either something divisible or indivisible is lacking: if indivisible, it will not be able to begin immediately after, because immediately after indivisible duration does not follow: if divisible, therefore it will not begin immediately after, since immediately after half of that divisible will begin before the whole, therefore immediately after it will not be whole and complete, and thus neither ultimate disposition. But as to the second part it is proved, because if some substance ceases through the last being, it follows either that two immediate instants are given, namely the last instant of cessation, and the first of inception of the following form, or to give matter without form for some duration, if designating one form another expects some time to begin.

Finally it follows that food can cease, or the form of the living thing be introduced before the matter is fully disposed, because if it is disposed successively and continuously, and if food is converted into the substance of the nourished, when it will have come to the last parts of food, in which it can be preserved towards the minimum, the middle of one part will be reached by successive motion before the other middle, therefore in that last middle food will cease by reason of the minimum before ultimate disposition is introduced, since this is introduced successively.

Lastly, Aristotle supports this who in Physics VIII, text 23, teaches that diminution does not happen continuously, by the example of a stone hollowed out by falling drops, which do not continuously diminish parts of the stone, so that if in so much time so much part is extracted, in the middle of that time half is extracted, but in that whole time it is disposed, and in the last moment the part is extracted, therefore the same will have to be said about augmentation.

I omit the convenience which some infer, because if nutrition begins immediately after an instant, alteration ceases in that instant because immediately after there is already the substance which alteration was disposing. I omit this, because already above in question one we said that ultimate disposition is not introduced by formal alteration, but by substantial generation itself, which is alteration eminently, because it is introduced simultaneously with substantial form. Hence in that duration in which substantial form is introduced whether in an instant or after an instant there is already ultimate disposition, and alteration ceases, which immediately before was placing something below ultimate disposition.

NEVERTHELESS IT MUST BE SAID: Augmentation and nutrition are successive and continuous changes, insofar as "successive" and "continuous" are opposed to instantaneous or occurring in a single instant; however they are not discrete. Yet it is not continuous if "continuous" means regular proportion, so that if so much is increased in so much time, immediately half of it is increased, and in a quarter of the time a quarter, but nutrition and augmentation admit irregularity, and consequently some discontinuity because of the dependence that nutrition has on the disposition of food, which is not always equal, and on the power of the subject, which is sometimes weakened and is not always in the same disposition. This conclusion according to both of its parts explains the mind of the Philosopher, and is that of St. Thomas. For in that part where the Philosopher posits that augmentation is motion properly speaking in Physics V, ch. 2, he consequently affirms that it is not instantaneous, nor happens through instants alone, whence St. Thomas expressly in the Third Part, q. 33, a. 1, in the body and ad 4, invalidates: "Augmentation is not an instantaneous action, but successive." The same is true of nutrition, which accompanies augmentation. But that they are not continuous motions in the second sense, that is, regular and according to the assigned proportion, is clear from the places of Aristotle and St. Thomas alleged in the first and last argument.

From these the foundation of the conclusion is taken, which is twofold. First, because augmentation is true motion, as it is distinguished from mutation, as Aristotle says in Physics V cited and we prove there in question 19, but motion cannot be in an instant, as we proved there in questions 14 and 21, therefore augmentation is successive motion.

The second foundation is that for nutrition and augmentation a determinate quantity is not required, as for first generation, therefore augmentation and nutrition ought to happen successively by diffusing quality uniformly difformly. The antecedent is proved, because in nutrition and augmentation the living thing is supposed to already have the quantity required for its consistency both as to the organs by which it can operate, and as to the due measure beyond the minimum in which it cannot be, therefore a determinate quantity is not now required in food to be converted, neither because of the living thing's own exigency, because it already has sufficient quantity beyond the minimum, nor because of the part to be newly aggregated, since quantity is not more required for the part to be aggregated to be newly informed, than for parts already aggregated to be contained under the form, for when they come anew and are united, they come as parts; therefore a greater quantity is not required for them than that they can be parts of the whole, and compose the whole with other parts, but for something to be able to be a part, a determinate quantity is not required, therefore neither for it to be aggregated as a part. Indeed the smaller the part, the more perfectly it will act on it and convert it to itself as fire converts smaller parts of tow or wood to itself, nor does it wait for them to grow to a determinate smaller part, therefore for generating something anew to a thing already produced, a determinate quantity does not contribute, but the smaller it is the more perfectly it will be generated anew. Hence the consequence is clear, because if a determinate quantity is not required, but any smaller one is capable of being generated anew, nothing will obstruct the continuity of augmentation, unless on the part of quality which is disposition, continuity is not given. But on this part it does not fail, because that disposition happens through alteration, which is continuous motion, and the dispositive quality itself is diffused uniformly difformly, so that if in this part ultimate disposition is given, in the immediate part what is immediately below it is given, and in another less and less up to no degree, therefore by continuing the action of generating anew, the introduction of disposition will also be continued in a smaller and immediately consequently smaller part, and thus in the same proportion the form of what is generated anew will be introduced in them.

But if you ask what is the reason for positing this mode of diffusion of quality uniformly difformly, it is answered first that this is clear from boiling, for the more something approaches fire the more strongly it is heated, and the more it recedes, the less, therefore heat is not diffused from fire equally in its whole sphere, but in one part more, in another less. Second it is clear by reason, because quality is not diffused from the agent by this, that the same in number passes from one subject to another, but by multiplication it is produced from one part to the immediate part, and thus it is diverse quality in one and in another, but any part of the medium in which quality is multiplied receives quality more imperfectly than it is in its proper subject, therefore it produces it more imperfectly, and thus the more it is elongated from the first agent itself, the more the quality itself produced by the following parts is weakened. The minor is clear, because if all parts of the medium received quality in an equal way, the agent would never have a term from within and per se, because if its power were not weakened, it would produce as intense an effect in the immediate part as in the distant part; and again that distant part will be able to place its effect equally in the immediate part as in the distant, and the reason is the same for any, therefore it will be able to produce without term at any distance, unless an extrinsic impediment is posited, and thus from within the sphere of power is not determined. But if quality is gradually diminished, and is not placed equally in all parts, therefore it is necessary that two parts are not similar, nor equal, but one participates more, another less, and this is to be multiplied uniformly difformly, that is, with dissimilarity through all parts but with uniformity in observing this inequality.

To the arguments made to the contrary. To the first from the authority of St. Thomas it is answered from what has been said, that augmentation is not continuous with regular continuity, so that if in so much time it grows in half the time half grows, yet he does not deny successive continuity, which is opposed to instantaneous mutations, as we said from the same St. Thomas. But what St. Thomas said, that for some time nature operates disposing, and not increasing in act, is verified in two cases, both in the time immediately after the first instant of generation in which food is not immediately disposed; and if from some illness, or from defect of food the disposition required for introducing the form of the living thing is discontinued, and thus it is necessary to consume time again, that it be disposed. Outside these cases if disposition is introduced in the current way, and without impediment, it happens through continuous motion.

To the second it is answered, that the introduction of substantial form generatively and totally, when it first happens, ought to begin through the first being, and the opposite cease through the first non-being: but the continuation and generation anew of partial substance is not inconvenient, that it begin in the mode of motion, and through the last non-being, and according to the mode of divisibility of parts. And to the first impugnation of the first part it is answered, that substance according to itself, and as it happens totally by first generation, is indivisible and happens in an indivisible mode, insofar as it happens integrally and totally, but as it is under quantity, and in the mode of a part, and of divisibility is acquired, it also happens in a divisible mode, and according to the latitude of parts, and then it does not happen absolutely from privation of form, but from privation of form, as so much, and in so much matter, and in such a part, which is divisible, and by reason of it it takes on the mode of divisibility. And although nutrition sometimes happens without augmentation yet it does not happen without new quantity, which constitutes the nature of a part in substance, which is acquired anew not absolutely, but as generated anew, and according to partial nature. But when it is said, that from privation to form there is not a divisible transition, it is answered that absolutely it is so, but per accidens, and by reason of adjoined divisibility latitude is given, and divisible transition, insofar as it passes from privation of substance absolutely, but from privation of substance as so much to this, that it be so much, nor is determinate quantity required for this in the part itself which is generated anew, as is required in the whole when it is generated anew, as has already been shown, for determinate quantity suffices for generation anew presuppositively, in that namely, to which a new part of substance is to be added, not in the part itself, which is acquired anew, since it is acquired as a part and through the mode of the divisible, not through the mode of the whole as it is whole and one.

To the second impugnation of this first part it is answered, supposing that ultimate disposition in nutrition accompanies substantial form in the same way, as partial, or partially introduced, as ultimate disposition for generation accompanies substantial form itself, as to be introduced first, and through the mode of the whole, so that priority and posteriority between ultimate disposition and substantial form is preserved in the same way in one as in the other. Which being supposed it is answered from what we said in Physics q. 21, art. 2, that a certain quality, that is, of determinate degree, such as is ultimate disposition can well begin in an uncertain and undesignated part through the last non-being. And so in generation itself anew, when in some instant it is true to say, now there is not ultimate disposition, or introduction of form, and immediately after there will be, and it is asked, whether in that instant something divisible or indivisible is lacking, it is answered that something divisible undesignated and indeterminate is lacking, not determinate. And when it is urged, therefore immediately after it will not begin, I deny the consequence, because speaking per se immediately after something divisible undesignated follows, and thus through part of motion, which will be immediately after, that divisible part of such quality which remains to be acquired is overcome.

But if you press: For in our opinion immediately after alteration motion no longer follows, but substantial action itself, by which mediately ultimate disposition happens, as we said above, q. 1, therefore that divisible part is not overcome through motion, but if it is overcome through generation, the thing generated is already supposed, when ultimate disposition is introduced, and overcomes that divisibility, which was lacking for the thing to be generated, it is answered that some say something divisible is lacking, and is overcome through motion in immediate time, since motion also is divisible. Which we also said in Physics q. 20, speaking of motion which begins immediately after that instant. But speaking of substantial action, when it begins immediately after an instant, as in our case, since immediately after nothing is lacking to be acquired through alteration motion because this already ceases, but through substantial action, which introduces form, and ultimate disposition (for we suppose nothing is lacking besides such ultimate disposition) therefore it must be said, that when immediately after an instant substantial action of nutrition begins, already in that instant nothing is lacking on the part of disposing quality, namely ultimate disposition, except something indivisible, namely ultimate disposition itself, which is the term of the remaining parts of disposition, but a term is something indivisible, but nevertheless from elsewhere, namely because it is introduced in an uncertain and undesignated part of the continuous, therefore on the part of such quantity, (which also pertains to dispositions) that ultimate disposition is introduced in a divisible mode, as also substantial form, and begins through the last non-being, but this is per accidens, as we have already said, insofar as substance is acquired in the mode of a part, and in an uncertain part, but a certain and indivisible form begins in an uncertain part through the last non-being, as we said in Physics q. 21, art. 2, in rule 2.

To the second part of the argument, it is answered that food as to that part, in which conversion begins through the last non-being, it is necessary that it cease through the last being, because the inception of one, and the cessation of the other are proportionate in this, but this whole is per accidens, and because that part of substance ceases as so much and divisibly, not as whole and indivisibly.

To the third it is answered that as we said in Physics q. 8, art. 3, when in food to be converted it comes to those ultimate straits, that there is no longer quantity, in which also by way of corruption the form of food can be conserved, those dispositions, which do not reach the ultimate per accidens are rendered ultimate, insofar as the required quantity being removed all dispositions conserving the form of food are destroyed, and consequently the form itself is loosed from matter, and the agent can by using generation introduce its form. Thus therefore per accidens from the removal of quantity, and consequently of the remaining dispositions, which are founded in it, substantial form can be introduced, and ultimate disposition following it, because impediment does not remain in matter, and the generator or its power is sufficiently approximated, that it elicit substantial generation in it.

To the last it is answered, the Philosopher stands for us, because he only denies continuity, which implies regularity, but does not deny continuity which is opposed to instantaneous mutation, for this did not serve his intent, but the first, because there he intended that no motion is continuous, that is, perpetual except local, and circular, for which it suffices, that augmentation is not perpetual, but is often interrupted because of indisposition of the subject or defect of food, and in this the similitude of excavation of stone by drops holds, because although when it happens it does not happen in an instant for the part which is extracted cannot be separated and removed except in time, yet because of dispositions required on the part of softening drops, it is often interrupted, just as augmentation. But the last drop extracting a part, extracts by divisible motion, yet not in such proportion, that if so much part is extracted in so much time, half of it is extracted in half the time.

ARTICLE V.

Whether in nutrition and augmentation every part of the living thing is increased and nourished?

It remains in these last articles to examine the conditions which Aristotle posits in augmentation, which are three. First, that something new comes or is added. Second, that every part is increased. Third, that the thing increased remains the same. The first is sufficiently known per se, we will treat the second in this article, the third in the following.

Concerning the second condition, then, a triple difficulty arises. First, whether all parts of the living thing are so increased, that not only aliquot parts, but also proportional parts [are increased]. Second, how food which is in the pores enters to the solid parts between pore and pore, without penetration. Third, how from the same parts are emitted parts which are corrupted and evaporate, and other excrementitious particles through the same pores without this that they are penetrated with food, which is in the same parts.

To the first, some think that in augmentation not only aliquot and certain parts are increased, but also proportional parts. And they are based on this, because Aristotle teaches that all parts are increased, without any distinction, therefore also proportional parts, because they are truly parts. Then, because aliquot parts do not have another entity distinct from proportional parts, therefore if an aliquot part is increased, a proportional part also ought to be increased. Finally, because for something to be increased immediately and per se can be taken in two ways. In one way, because [it is increased] not through something extraneous, but intrinsic to itself, in another way, because it is increased not only according to part, but according to all parts. In the first way, both an aliquot part and a proportional part will be said to be increased, because through the ultimate part or extremity it receives increase. In the second way, neither an aliquot part nor a proportional part will be increased, because food is only applied to the extremity itself, it does not pass within through all parts, otherwise augmentation would be either mixture or penetration of parts.

Nevertheless, proportional parts cannot be said to be increased in continuity or magnitude, but only aliquot and determinate parts, to which when added new proportional parts are also added by plurality as if of multitude in potency not of increase, because namely more parts can be taken proportionally than before. This is taken from St. Thomas on Generation, lecture 15, who explaining that saying of the Philosopher: "That it is of the nature of increase, that any sensible sign is rendered greater or less, says, that any sensed sign, that is, any sensible part of that which is increased becomes greater in increase, or less in diminution." Nor does it avail to say that Aristotle only wished to say that through sensible parts themselves the motion of augmentation is rendered sensible, although he does not therefore deny that proportional parts are also increased. But against this is, because this is common to every sensible motion, that it happens in magnitude having sensible parts, and thus the Philosopher and St. Thomas would say nothing special about the motion of augmentation, how it seeks its parts to be increased, and then, because if motion, that it be sensible, requires a sensible and aliquot part, therefore since a proportional part is not sensible per se, but through an aliquot part, because it is not designable, therefore it does not terminate sensible motion per se, therefore neither motion of augmentation, which is essentially a species of natural or sensible motion. But the reason for the conclusion is, because if proportional parts were to grow or diminish they could become greater or less, and thus growing through increase they would become designated, since quantity growing, it ought to grow up to some term, and parts under that term would be designable. Then, because proportional parts are no less infinite in small quantity than in great, because in both they are indeterminate and undesignable. Quantity growing, therefore, either those parts remain indeterminate and undesignated as before, or not. If not, therefore they become designated and aliquot and thus increase will happen in aliquot parts, and since those proportional parts were numerable to infinity, if they become aliquot and designated infinite designated parts will remain, which is to render the infinite in act. But to say that some undesignated become designated and are increased, besides that there is no greater reason for one than for another, this will already be to deny that not all parts are increased simultaneously. But if they remain equally undesignated as before, therefore they are not increased, nor do they grow more than before in the nature of the continuous and divisible, although because new aliquot parts are added also more proportional parts are added, which are included in them by addition of plurality, not of increase, but that plurality is not in act separately, but included in aliquot parts.

To the opposing reasons it is answered. To Aristotle we say that he teaches all parts are increased, but he does not say how they are increased, for aliquot parts are increased also according to continuity, because they become greater and are divisible into more parts, but proportional parts do not become greater according to continuity, because they are not capable that they be greater, by this itself that they are undesignated, because although any designated part is divisible, yet it is not determinately divisible except through an aliquot part. Hence an aliquot part will grow or diminish by taking a greater or lesser term, which pertains to determination of divisibility, but proportional parts will grow only in number with a new aliquot part coming, because it can be designated more often, and divided into more proportional parts.

To the first reason we say that aliquot parts do not have another entity from proportional parts, but not the same mode, because aliquot parts have extension in a determinate mode and therefore can grow or diminish determinately, but proportional parts are indeterminate, and so are not capable of growing and decreasing continuously, because increase does not happen except by taking a new greater or lesser term, and consequently determinate.

To the second it is answered that increase applied to the extremity of a part increases an aliquot part continuously, according to the determinate, but proportionally not continuously, nor according to determinate term, but in the mode of number, because in more ways quantity itself is rendered divisible.

Concerning the second and third difficulty we suppose that food is not brought to solid parts except through pores, which are certain very thin openings, which are filled with the thin body of food, and through which sweat or other evaporations exit, yet between pore and pore there is some solid part, otherwise the whole would be empty. But it is necessary to posit these pores, because otherwise smaller corpuscles, either liquid or evaporable, could not enter or exit from the body, except either by penetrating other parts, which is impossible, or by dividing, which would be to corrupt and cause pain. Nor is it an obstacle that Aristotle in this first book, text 80, refutes the opinion of some who admitted pores, that through them augmentation would happen: "For thus," says Aristotle, "augmentation would happen through juxtaposition." For it is answered, as is clear from the letter and from St. Thomas there lecture 20, near the end, those Philosophers posited pores that in them there would be certain corpuscles or atoms which would compose addition without any transmutation, but this would be to destroy augmentation and alteration.

This being posited, the difficulty remains, how from the pores themselves solid parts are increased, so that food passes to parts between pore and pore, and yet does not divide them, nor penetrate. And similarly parts which are resolved and lost through heat ought to evaporate and be emitted through the pores themselves, but they are full of food, therefore they will be penetrated, by existing simultaneously with food itself and passing through the pore itself.

It is answered that neither penetration nor division happens in nutrition, because liquid food or blood placed in a pore is coagulated into flesh by the nutritive power of the neighboring part of flesh, and is united to that extremity of the part touching the pore, and in that part thus coagulated pores are also made anew, but something of flesh is resolved into excrementitious evaporation, and that can pass through the pore, because the coagulation of blood into flesh having been made, blood now occupies less place in the pore, and in the new part of flesh itself pores are also made anew, and thus place is given to sweat or exiting evaporation: as when a pot of water is placed on fire, and the nearer part is heated, the upper part which is not colder descends, and the hot part made lighter ascends, without any penetration, because the colder part by its gravity cuts the more subtle and hotter part. Thus with part of blood coagulated into flesh it occupies less place, because it has been made denser, and thus gives place that another more subtle part enter, or another be emitted. Similarly when that part of blood is coagulated into flesh, it is united to the extremity of the part but does not cut or is introduced into the solid part, but the solid part is gradually resolved by the force of heat, and to it gradually succeed those new parts which are coagulated, and thus the preceding part is not penetrated nor divided, but is united to its extremity, but interior parts are gradually resolved by the force of heat, and thus augmentation happens at the extremities. Finally, these pores are easily dilated or constricted, as happens in wineskins according as they are filled more or less with food, especially in more tender parts and easily yielding, and then more or less of food enters, or of excrement exits making some constipation of parts as much as is required, that the pore be more dilated, and thus it is not necessary to have recourse to penetration, that those vapors exit through pores, when they are full, but to some constipation or condensation. Nor from this does it follow that nutrition happens through juxtaposition only, as water is added to water, but beyond that conversion of the juxtaposed part into the substance of the nourished is also required, and loss of another, which is repaired through that new part.

But you will ask: Why do some parts not grow, like eyelids, but some parts even when augmentation of the whole ceases always grow, like hair and nails. It is answered that parts of the body are not of the same temperament and quality, and so do not receive increase in the same way, but some grow more slowly or little like eyelids, others for the whole time of life, like teeth because of necessity lest they be destroyed by continuous attrition of foods, some also because of abundance of matter and ease of transmutation are perpetually increased, like hair and nails, for excrementitious soot always supplies, from which hair is augmented, and these excrements abound in any age, unless because of some impediment or contrary disposition that formation of hair is impeded, as in bald people, yet they can always grow, because heat always has sufficient power to resolve more and convert from these excrements into hair and nails, because they need less cooking. But that some grow more in certain parts, in others is per accidens because of abundance of heat in some, and defect in other parts, or also because of abundance or defect of food.

ARTICLE VI.

How the living thing remains the same throughout the whole time of nutrition and growth?

This is the last condition that Aristotle requires for the nature of augmentation, that what is increased always remains the same, as is clear in this book, text 33 and 34, and there St. Thomas lecture 14. And the reason is clear, because if what is increased did not remain the same it would be corrupted and cease to be, and consequently something else would be generated, and thus augmentation of the same would not happen, but corruption of one and generation of another, and so increase would be to the destruction and harm of the thing to be increased, when yet augmentation and nutrition are ordered to the conservation of the same subject and its continuation; but if it were corrupted, the end of such nutrition would cease, and it would pass into generation and corruption, but if it is not corrupted, therefore it remains the same as before, because it does not cease to be.

However, from the very nature of nutrition arises a doubt about this condition, and that nutrition happens through the accession of new parts and the loss of old ones, therefore the same parts do not remain as before, indeed at length all are corrupted, and others come, therefore neither does the same whole remain, because this is nothing other than its parts. Nor is this solved by saying that the same formal parts remain, and not material parts. For against this is first, because formal parts are nothing other than matter itself, and the entity of parts under such form, and mode therefore with matter itself ceasing through succession of new parts, also the form which was in such matter is dissolved, and thus it does not stand that material parts are lost, and not formal. Second, because numerical unity of parts and of the whole depends on matter and its quantity, as on the principle of individuation, therefore if material parts are lost, also the principle of numerical identity is dissolved, and thus the same living thing in number does not remain, nor the same whole in number, just as neither do the parts. Third, because in imperfect animals and plants with a new part of matter comes a new part of form, therefore at least in them formal parts are changed, because form itself or soul is changed.

To the first it is answered, that the Philosopher in this first book On Generation, text 35 and 36 says, that according to species or form it remains, and according to matter it comes and goes in increase, and thus it remains the same in number formally not materially. Which some have wished to interpret wrongly, that flesh remains according to species, that is, that which is first received from the generator, but that comes and goes which is taken from food. Which exposition is excluded by St. Thomas in the First Part, q. 119, art. 1 ad 2, and above by us was excluded, because since natural heat acts on all alterable parts, there is no reason why it should not act on those which were received through first generation. But whether all parts even harder ones, like bones, are totally consumed through heat, or something of them always remains, some affirm, but the matter is altogether uncertain because of the variety of time of life, for animals which live for a very long time there is no doubt that heat at length transmutes and consumes even harder parts received from the beginning of generation, but those which are of shorter life perhaps will not consume all these harder parts, according as life will have lasted more or less.

Wherefore St. Thomas explains that distinction of the Philosopher about flesh according to species and according to matter according to diverse consideration, for if it is considered according to what is formal in it, thus the same flesh remains, but according to what is of matter, thus it does not remain, but is gradually consumed, as we see in the continuous nutrition of fire through wood. But this formal is understood, that disposition under which flesh remains as to figure, temperament, order to the remaining parts, and to form. And this formality or disposition is understood to remain by unity of continuation under parts of matter succeeding, not by unity of indivisibility, about which St. Thomas can be seen in Contra Gentiles IV, ch. 82, ad 4.

To the first reply against this solution it is answered, that when material parts are said to be lost, and not formal, it is not understood that with parts of matter succeeding the same accidental form so remains, that it passes from subject to subject, for this cannot be, but just as material parts are lost, so also accidents as affixed to them, which is also that accidents materially taken pass away, but formal parts are said not to be lost, because under the same continuation parts are ordered in the same way to composing the whole itself, not by unity of indivisibility, which is not owed to it, but of continuation. The reason for this we can take from St. Thomas in the said q. 119, art. 1 ad 4, and from what we noted in Physics q. 6, art. 1, because when in fire or a living thing with food gradually consumed another is substituted, always the same in number remains, which always, what is added, passes into the pre-existing. Which reason consists in this, that when continuously and gradually something is added to another, what is superadded, by that continuity itself becomes one with the pre-existing, and again when something is superadded it also becomes one with that; whence although it is lost successively, yet by reason of that continuity it is always verified that something of the whole itself remains with the supervening part, and consequently by reason of such continuation under similar accidents and disposition the same numerical unity remains, not indeed numerical, not indeed so perfect as those which are indivisibly one, like an angel or heaven, but by unity of continuation. But if the whole matter of one were removed from it simultaneously, and another total matter were substituted anew, it would not be the same in number, because such would be one neither identically nor by continuation with another.

But if you press: In this no greater unity is posited in the living thing than in a river or people, which are said to be one, although parts flow and men change, because they flow under the same relation and disposition and order, which is to have only unity of order, not of substance, it is answered that there is a wide difference, because a people is not said to be one by any physical unity according to continuation of parts, because men are diverse in number only having coadunation of living together, which is moral unity, and in a certain respect, insofar as they live under the same laws and society. But a river although it has all parts continuous and flowing, yet one part is not continued to another through conversion and mixture, but through succession precisely, because one is after another, whence parts which now succeed have no unity with parts which were had in the river twenty years ago, because a succeeding part is not mixed and converted into the substance of the whole, but is emitted consecutively after another. But the opposite is in parts of an animal, in which not precisely one is emitted after another, but by conversion itself into the substance of the pre-existing it pertains to the same unity with it according to conversion and continuation, not by pure and sole succession. And moreover in perfect animals indivisible unity of form is also given, as we will say in q. 1 On the Soul, art. 1, and thus an animal is so disposed that it can retain something altogether and indivisibly one whether form or some harder parts at least for some time, but a river at no time is the same permanently and indivisibly, but is one by succession alone.

To the second reply posed above it is answered, that numerical unity is taken from designated matter, and subordinated to quantity and the remaining dispositions, on which unity or division depends, as we will say in the following question. Whence thus matter ought to be one just as numerical unity itself, which it provides, is one, for if it is one by continuation, it suffices that designated matter as principle of its unity is not identically one even materially, but it suffices that it be one by continuation, and according to formal parts, or according to the sealing of continuation, not of indivisible unity. It is otherwise if numerical unity is altogether indivisible and identical as in heaven, for then similar identity is required also in matter, which is the principle of that numerical unity.

To the third it is answered, that in those animals a new form comes, just as also a new part of matter, but both become one by continuation, and subordination to the same whole, which they compose, by reason of which parts of matter are said to remain the same formally, even if they do not have form indivisibly the same. But if substantial form is also given indivisibly, the same greater unity will be given, but nevertheless this is not required, but numerical unity can be saved simply by unity of continuation and the aforesaid subordination always composing one upon one permanent whole through conversion of one into another not through succession alone. And so numerical unity is not found in the same degree in all things, but is greater or less, according as it approaches more to indivisibility or immutability of parts, or recedes.

QUESTION IX.
ON THE SUBJECT OF ACCIDENTS AND THE PRINCIPLE OF INDIVIDUATION.

ARTICLE I.
Whether material accidents are subjected in the whole composite, or in matter alone?

Two kinds of subject are commonly distinguished, namely of denomination and of inherence. The subject of denomination is that which is denominated by the form, that is, receives its predication. The subject of inherence is that to which the form is united, that is, receives its actuality and being. In the subject of denomination is included everything of which the predication of the form is verified, whether it is the principal subject, or less principal, or of extrinsic denomination, or intrinsic; for not only is a stone called white which is the principal subject, but also quantity is called white, which is a less principal subject, and a wall is denominated seen extrinsically, but a man seeing intrinsically. In the subject of inherence is comprehended the subject "that", that is, the subsisting thing itself or supposit, which is related as agent or recipient as the ultimate subject and the subject "by which", that is, which is the reason or medium of receiving.

Concerning the subject of denomination there is no difficulty among authors, that an accident can denominate the supposit itself, as when a man is called white, nor do we doubt that a part can also be denominated by accidents, as when hair is called curly, eyes blue, surface white, etc. Although in verifying the denomination of the whole and part the rule of St. Thomas in the Third Part, q. 16, art. 8 should be observed, that when some form can indifferently denominate the whole and part, if it is only in a part, it does not denominate the whole absolutely, but only according to the restriction of the part, as an Ethiopian is not denominated white from the whiteness of his teeth, because whiteness is born to befit the whole body and part. On the contrary, if some accident is born to befit a part and not the whole, it denominates the whole absolutely, although it befits only a part, as a man is said to see absolutely, although he sees only with his eyes, and curly, although he is curly only in his hair. And for this reason Christ is not called a creature absolutely, because this predicate is transcendent founded in limited being itself, which does not befit nature alone, but person, indeed it befits person first, rather than nature. However he is called a servant absolutely, because servitude is founded not in being itself, but in the dependence of something on another in its operations or motion, for a servant does not move himself, but is moved by another as an instrument, but the principle of motion is nature, not person.

Wherefore the whole difficulty is about the immediate subject of inherence, namely to what the inherence of an accident is immediately terminated, and by what it is immediately sustained in being.

The principal opinions in this part are reduced to two. The first holds that prime matter is the sufficient subject of inherence of accidents. The second asserts that only the composite is their immediate subject. But no mention is made of form, because it is not the reason for receiving, but for actuating and giving being, and so, if it is not subsisting, it is the same reason as for matter with respect to accidents emanating from it: but concerning subsisting form like the rational soul it is the same reason as for the composite, because it is subsisting, and in fact is the subject of intellect and will.

The first opinion is commonly attributed to Averroes, who posited that quantity or indeterminate dimensions are coeval with matter, as St. Thomas reports especially in Opusculum 32, ch. 4, and often seems to speak according to the same opinion as in IV Sent., dist. 12, q. 1, art. 2, q. 4 and Contra Gentiles IV, ch. 81, and other places, and many of the ancients followed the same opinion, who are cited by Master Bañez in I De Generatione, ch. 4, q. 9, art. 3, and by Fr. Suarez in Metaphysics disp. 14, sect. 3, at the beginning. But of recent authors some attribute not only indeterminate quantity, but also figured and terminated quantity to matter as subject, so that the same quantity with matter passes from the corrupted to the generated. But they are divided, for some attribute to matter according to itself, and independently of form, that it receives quantity and accidents; for which part Master Bañez cites many of the ancients in the cited place, art. 1. Others think that matter is the subject of inherence of accidents, supposing however substantial form, by which it is first actuated; for which opinion Fr. Suarez stands in the cited place, num. 31, and the Coimbra Commentators cite and follow many in I De Generatione, ch. 4, q. 4, art. 1. However they add at the end of the article that matter does not depend in this role of sustaining accidents on form, as on a condition sine qua non, but as on a cause enabling matter itself and perfecting it in being, so that it can sustain accidents, for of itself it is not sufficient, because without form it does not have being. Finally, many think that accidents depend on matter as on a material cause, but on form as on a cause from which accidents effectively emanate, and are received in matter, and therefore when a transition happens in matter from one similar form to another similar, corrupted qualities can pass to the generated, because it is not repugnant that a quality which proceeds from one, be conserved by another similar.

But the opinion of St. Thomas is commonly followed by Thomists like Cajetan on ch. 7 of On Being and Essence; Capreolus in II Sent., dist. 3, q. 1, art. 3; Durandus in VII, in the second part, dist. q. 4, num. 15, and Master Bañez can be seen in the cited place, and Flandria in Metaphysics V, q. 16, art. 17, although he concedes that relative accidents can be subjected in matter alone, like the relation by which matter respects form.

Therefore that the opinion of St. Thomas may be explained it is necessary to note two things. First, what is required for something to be a subject of inherence. Second, what is to inhere itself, and what is required for it. As to the first, two conditions are required, that something be a subject of inherence. First, potentiality for receiving accidental form. Second, actuality for sustaining in being. As to the second two other conditions are required; first, that it be a real form, that is, a reality, and not a mode; second, that its actuation does not give being simply, or first being to the subject, but supposes first being, but provides dependent and consequent being. Whence in this substantial form differs most from accidental, that although both are united and depend on a subject, yet substantial form only depends on the potentiality of the subject, that received in it it be rendered incommunicable, but it does not depend on its actuality, but rather informs pure potency, which is prime matter, but accidental form not only depends on the potentiality of the subject, in which it is received, but also on its being by which it is sustained, because the being which accidental form gives, is secondary and consequent being, which necessarily supposes primary, and therefore it is called inhering, it depends on the being itself of the subject as on first presupposed being, but does not give first being. Whence St. Thomas says in Opusculum 31, at the beginning: "That properly what is in potency to substantial being, is prime matter, but what is in potency to accidental being, is called subject, for the subject gives being to the accident, because an accident does not have being except through the subject, whence it is said, that an accident is in a subject, but it is not said that substantial form is in a subject, and according to this matter differs from subject, because subject is, what does not have being from this that something comes to it, but what is through itself, and has complete being, as a man does not have being through whiteness: but matter is said to have being, from this that comes to it, because of itself it is incomplete being, indeed it has no being, as the Commentator says in On the Soul II." Whence speaking simply form gives being to matter, but an accident does not give being to the subject, but the subject to the accident.

You will say: Prime matter also requires resistance that it receive substantial form, otherwise it would be received in nothing, or in non-being, therefore this doctrine does not stand. Likewise an accident is not received in the existence itself of the subject, nor insofar as it is being in act, but as it is in potency to such accident, as to form as St. Thomas says in Contra Gentiles I, ch. 23, and in the First Part, q. 3, art. 6, that the subject of an accident is compared to it as potency to act, because an accident is a certain form making being in act according to accidental being.

To the first it is answered, that prime matter for receiving substantial form requires being concomitantly, but not presuppositively, and as that, by reason of which it receives, but in reality it always exists, and receives by existing, because it has being from substantial form itself, and thus it is not received in nothing, but in being which of itself is capable of existence, and in potency to it, but as it is under form in fact through it it is existing, and in act. But for receiving that form, which gives first and substantial being, no being is prerequired in matter, or capacity and potency to being, in which it already differs from nothing itself and non-being, because nothing neither has existence, nor is capable of existence and actuality, not only objectively, but also subjectively, but by existing it receives form, not because existence precedes, but because it accompanies. But accidental form does not give first being, but secondary and consecutive, therefore it necessarily supposes the subject to be existing antecedently, and is rendered dependent on its being as on fundamental being, which underlies it, and in which the being itself of the accident is consolidated.

To the second it is said, that an accident is received in the subject, insofar as it is in potency to the formal and specific effect of the accident, which is communicated to the subject as its actuality but the same accident as to the exercise of existing depends on the existence of the subject, which is existence per se, not as on the formal reason of receiving, but as on terminating the existence of the accident, which cannot stand per se, but in another, and so from it, as from first being per se underlying it is terminated, and depends in exercise on the existence of the accident. And therefore it can be supplied by God, that without substance sustaining it the being of the accident remains, because it only depends on it as to the exercise of existing, and as to termination in another, but the exercise of existing the first cause can better supply by effecting, than substance by sustaining and terminating. Whence substance is not a purely material cause with respect to the exercise of existing of accidents, but has something mixed of the formal in the nature of terminating and sustaining, insofar as the subsisting being itself of the subject is communicated to accidents, not that it render them subsisting, but as existing in another, yet so terminated, that they no longer need to be communicated to another that they be sustained in being, just as also when new parts pertaining to the being of the whole come to some substance they are drawn to the subsistence of the whole, not that they subsist separately and totally, but inadequately and in another, and as parts depending on the whole, so accidents, that they exist secondarily, and this is to inhere, that is, so to depend that they are terminated secondarily by the being itself of substance, and are rendered existing in another not per se first.

Therefore let there be a single conclusion: In the opinion of St. Thomas: that matter is pure potency, in no way can matter itself, even supposing form as only a condition, be by itself alone the subject of inherence of material accidents, but the composite itself is the subject of inherence, while matter is only receptive of accidents as the subject "by which", insofar as it is that by which the composite receives accidents after substantial form is received in matter, and we speak of material accidents, because spiritual accidents like intellect and will are received in the soul alone which is subsisting without any dependence on matter. This opinion is without doubt that of St. Thomas who commonly teaches that prime matter is not the subject of accidents, as he affirms in On Being and Essence ch. 7 and in the First Part, q. 76, art. 6, and q. 77, art. 6, where he says: "That because substantial form makes being simply, its subject is being in potency only, but accidental form does not make being simply, but being such or so much, or somehow disposed, for its subject is being in act." Nor did the holy doctor teach the opposite of this in On Truth q. 25, art. 5 or 6, as can be manifestly seen there.

The foundation of this opinion is taken from what has been said, because in prime matter are not found the conditions and requisites, that it be formally and properly the subject of inherence of accidents, though well that it be the principle of composing such a subject, and that by which the subject is rendered receiving, but form is the principle by which it is rendered actuated for sustaining. That the said conditions are lacking to matter is proved, because the subject of inherence ought to consist of those two conditions, namely actuality for firming and terminating in being, potentiality for receiving; but on the part of actuality prime matter lacks of itself all actuality both formal and entitative, as we proved in Physics I, q. 3, and above q. 1, and given that it had some being, that is imperfect, and not sufficient for existing simply without form, nor does it constitute through itself alone being underlying and subsisting in act, but is only the principle of the subsisting and underlying composite, therefore it does not constitute the nature of subject of accidents. The consequence is proved, because what is properly subject, and not only principle of subject or subject "by which" of accidents, ought to be underlying, and simply having being; for an accident depends in its being on that, which is being simply, nor does inchoate being or principle of being suffice, because an accident does not acquire being in a subject, except that it receive termination and sustentation in its own, since of itself an accident is form, and principle of existing, but because imperfect, and in a certain respect it requires not to stand, nor to terminate this being in itself, but in another subsisting, nor does it have itself as substantial form, which constitutes first being itself, but accidental supposes that and gives secondary being descending from the first, but matter is a part or principle of that first underlying and subsisting being, nor does it have that in itself, because with substantial form it constitutes one being simply, therefore it constitutes one subsisting and underlying being, therefore according to itself, and without form it does not have that underlying being, except only as "by which", and as principle of underlying. And it is confirmed, because first and per se underlying is first substance, as the Philosopher teaches in the chapter on substance, for it is its property, that it be maximally underlying, and consequently principally and first, but first substance is not matter alone, but the composite, because it is "this something", as Aristotle says there, but matter is not "this something", as is clear from Metaphysics VII and Physics V, where the Philosopher proves that matter is not the subject of motion, because it is not "this something", and it is manifestly clear, because "this something" or first underlying is that, which underlies superior predicates and accidents, therefore that has itself as underlying accidents, as first substance, which underlies superior predicates; but that underlies superior predicates, which is subjected to them, and of which they are predicated, but superior predicates are not predicated of matter, as man, animal, etc. because matter is a part, but not that of which these are predicated, therefore it is not "this something", nor maximally and first underlying, therefore neither formally and per se is it the subject of accidents, because a subject ought to be underlying, and terminating, and sustaining accidents, therefore if matter does this, it will be in virtue of first underlying or first substance, because that which is first and maximally such is the cause from which those which are not maximally such participate a similar effect, therefore if matter underlies it has this in virtue of first substance, not in virtue of its own actuality, even given that it had that, because it does not have that as first substance, but as composing first substance, and as a part; but from first substance itself an accident will depend per se as from terminating and sustaining its being, not as from a condition only.

But that on the part of potentiality prime matter is not immediately susceptive of accidents is clear, both because that potentiality essentially respects forms in a certain order, first substantial, then accidental, for first it respects that with which it constitutes nature, and being simply, which is substantial being, then that with which it constitutes accidental being, and in a certain respect. And the reason for this is, because the potentiality of matter is substantial potentiality, therefore it is essentially ordered and specified by substantial act, therefore it receives substantial form more immediately than accidental, since potency susceptive of two forms respects that more immediately which is more proportionate to it and pertains per se to its specification, therefore since substantial form is act specifying substantial potency and immediately proportionate to it, matter essentially respects that more immediately than accidental form, and consequently, just as it is not capable of receiving accidental form except mediately, that is, through substantial form, so neither will it be capable of receiving, because it receives in the mode in which it respects. Finally, an argument is made in acts of the senses, and in operative powers, for immanent actions are subjected in that principle from which they are elicited, otherwise they would not be immanent, but they are not elicited from a power subjected in matter alone, since they do not have activity and influx from matter, but from the soul, whose instrument and power is that potency, and by the same influx, by which the potency operates the substance, whose potency it is, influences, and thus since form influences through such power it is necessary that it be united to it, and not to matter alone. But if such potency, and its act is united not only to matter, but also to form, we will say the same of quantity, and the remaining accidents, both because it is the same reason; and because that sensitive power and its act ought to be received in the organic part, and in an extended mode, otherwise it would not operate materially, therefore just as potency, and its act respect both principles, namely form and matter as subject of inherence, so also quantity through which they inhere.

Finally the last part of the conclusion, that matter is subject "by which", or principle of receiving is clear, because matter is the first root of potentiality and reception in the composite since it is potency and first in the genus of receiving, whence whatever is received in the composite, has for principle "by which" and first root of receiving matter itself, similarly substantial form is the first root and principle of actuality and being, since it is the principle of being itself simply, or substantial being, which is given through form, but whence being simply arises, a fortiori being in a certain respect depends, therefore matter and form only have themselves as principle "by which", because they are constitutive of the subject itself on which accident depends as to the nature of potentiality through matter, and actuality through form.

Which is not to be imagined, that the subject of inherence is the composite, in such a way that accident equally inheres in and is received in any part, but it is received through matter, as principle "by which" of receiving, and in form it is not received, but depends on form as on a principle giving actuality and being, which because it is being simply terminates, and firms in existing accident, which gives being in a certain respect. And thus both matter and form have themselves as principles of the subject of inherence, but not equally, nor both by receiving, but one as principle of receiving, the other as principle of actuality and being simply and per se, on which being in a certain respect of accident depends. Nor is it required for receiving accident in the composite, that any part receive, but it suffices that one part be the reason for receiving as principle "by which", just as vision is not received in every part of man, but only in the eyes and by reason of them it befits the whole man to see, so accident through matter is received as principle "by which" of receiving, although it also depends on form, as on principle of giving being. And for this reason the composite itself is called the subject "that" of accidents, not only because it is the subject of denomination, but because it has in itself the conditions and principles required for inherence, namely the principle of potentiality on the part of matter, and of actuality on the part of form. Nor is there in accident a double union to both parts of the composite, because both do not have themselves as extreme, but the integral extreme is the composite, but matter and form are not the extreme to which union happens, but principles constituting such an extreme, and therefore there is only one union not two, even partial, because those two parts, namely matter and form, are not two parts as two extremes of union, but as constituting one extreme, in which indivisibly are all conditions, that it be subject of accidents, not in any part separately are these conditions found.

But you will ask, whether this composite, which we say is the subject, is nature itself which is composed of matter and form, or rather the supposit. For if it is nature, since it is also principle "by which", we do not yet assign the principle "that" of inherence, but only the principle of the subject of inherence; but if the supposit itself is subject "that", therefore with the supposit varied accidents will be varied, and so if now the Word were to dismiss humanity, or if it were to assume mine, all accidents of humanity would be varied. It is answered that without doubt the supposit is the subject of inherence as term, just as matter and form are principle "by which", one of receiving, the other of actuating as we have said. Wherefore the accidents of Christ's humanity are not inherently in the Word by mode of reception, yet they are terminated by the Word mediately, namely through the termination of humanity, and consequently indeed there remains terminated, and depending on its existence whatever is united to it, and adjoined. Whence if humanity were dismissed by the Word accidents would not be changed, as they are changed when the union of form and matter is dissolved, because accidents depend on matter and form as on immediate principles, on subsistence as on mediate term, but with principles to which something is immediately united varied, the united form also ceases, but not with that which has itself as term, and as something immediate varied; just as in the Eucharist with the substance of bread and wine destroyed, because nevertheless quantity remains, to which accidents are immediately united, they are not destroyed; but if quantity were destroyed, accidents conjoined to it would be destroyed, even if substance remained.

And if you ask whether quantity has itself as principle "by which", like matter, because it is the reason and medium of receiving material accidents in the way that intellect is the reason for receiving intellection, it is answered that quantity is not a principle as root for receiving accidents, and so properly is not principle "by which" of receiving, but medium, because namely quantity is not the principle of underlying, which pertains to the nature of subject of inherence, but is said to be medium of receiving, insofar as among accidents themselves there is order, so that all do not equally immediately befit substance, but one is disposition to another, or reason why one befits the subject, like proper passions, which have order among themselves, one is the reason why another emanates, like will by reason of intellect, and quantity disposes for receiving quality, and cognitive potency for receiving cognitive act. Yet accident is not said to be medium as if it provides the reason or power of sustaining, and thus constitutes the nature of subject. And this is gathered from St. Thomas in the Third Part, q. 77, art. 7 ad 2, where he says: "That accident cannot per se be the subject of accident, but one accident is received in substance prior to another, like quantity than quality." And similarly in I-II, q. 7, art. 1 ad 3, he says: "That two accidents are sometimes compared to a subject without order, as white and musical, sometimes with some order, namely because the subject receives one accident through another, as a body receives heat through surface, and thus one accident is said to be in another." See what we said in Logic q. 15.

It follows from what has been said, that the potency susceptive of accidents ought to be entitatively substantial, since it is not receptive in just any way, but also sustentative of accidents, but for sustaining more perfect being is required, namely being simply, on which depends the being of the thing, which is sustained and inheres. However relatively, and terminatively, the potency receptive of accidents can be called accidental to the difference of potency receptive of substantial form, in the way that obediential potency is entitatively natural, but according to capacity is subjected to supernatural principle, and is terminated to supernatural form. But that potency and act ought to be in the same genus, is understood of potency and act, which are altogether adequate, not of potency and act, which have themselves exceedingly. Concerning which axiom see the explanations posited in Physics q. 12, art. 2.

Arguments are solved.

First, it is necessary to examine the foundation of Fr. Suarez in Metaphysics disp. 14, sect. 3, where he holds that prime matter can be and sometimes is the proper subject, to which alone quantity inheres, because matter of itself has potentiality for receiving accident, and has sufficient being for sustaining it, since it does not lack existence, as it is being in act and outside its causes, otherwise it would be nothing; but that it depends on form does not matter, because it depends on that as on an extrinsic cause, just as the composite also depends on dispositions, and yet does not receive accidents through them, therefore matter according to itself is a sufficient subject of inherence of accidents. The antecedent is proved, for matter has sufficient entity for sustaining substantial form, therefore a fortiori for sustaining accidents because they are of weaker entity, and thus suppose less actuality in the subject. But that it so happens in fact, that accidents are united to matter alone, he proves by the example of man, in whom quantity cannot be united to form, because it is spiritual, therefore to matter alone, because nothing else remains in which they are united. But quantity is united in the same way in the human body, and in other bodies. Then, because the same accidents remain in the generated and corrupted, as the same color, the same figure, etc. likewise because matter ought to be determined through disposition to form, and through these form ought to be educed, quantity also ought to divide parts of matter before form is applied to it, which is only applied to so much or so much matter, therefore it ought to receive quantity and dispositions before substantial form. And it is confirmed, because accidents in no way depend on form, nor does form have causality in them, for it does not cause them materially, since it does not express receptive potentiality of them, nor formally, since it does not inform accidents, but matter, nor efficiently, since many accidents do not emanate from form, nor does form effect without accidents, therefore.

It is answered that matter is not in act without form, since it participates existence from it, but of itself it has receptive capacity of substantial being through form, as has often been proved. And given that of itself it had some being not communicated through form, but independent of it, yet it is not sufficient for sustaining accidents, because it is not underlying and terminated being in itself so that it can terminate the being of accident, that it be said to be in another; nor can it immediately respect accidental being which is in a certain respect unless it first respects being simply, which is substantial being. Wherefore matter does not depend on form, as on conserving, as the composite depends on dispositions, since form cannot conserve matter, except mediately by some formal effect, but this formal effect is not dispositive of matter, because it is substantial information, for it gives formal effect by providing substantial being itself, or by determining the indifference, potentiality of being itself which matter has, therefore it is necessary that matter in its being depend on form, if it is conserved by it, since it is determined through form, and receives substantial being from form. But that matter has sufficient power for sustaining substantial form does not argue that it can sustain accidental, because it does not sustain substantial form by giving it being, but by receiving from it, and only provides it the mode of existing receptively, and not permitting it to be further communicated, but it sustains accidental form, by giving it being, as per se terminating and underlying it, and so for the first receptive potentiality of substantial being suffices, but for the second substantial actuality is required, both complete and per se, which sustains the secondary being of accident.

But to what is said about man underlying quantity, and the remaining accidents, from what has been said it is clear, that human form does not concur by receiving, as neither do other forms, because it is not subject "that" receiving, since it is not the whole, but a part, nor is it subject "by which" of receiving, since it is not principle of receiving, but of actuating, which is also required for inherence on the part of the subject, as also the condition of potentiality for receiving of which the principle is matter. And it is not repugnant that the rational soul be reason, and co-principle for inherence of material accidents although in itself it is a spiritual entity, because it does not concur to such inherence, insofar as it is spiritual, but insofar as it gives corporeal and sensitive degree, for just as it is not repugnant, that the soul be spiritual entity, and because of its eminence elicit corporeal operations of the senses, and provide corporeal formal effect by constituting body and animal, so it is not repugnant, that it have itself as principle, for terminating corporeal accidents in being: but immaterial accidents like intellect and will, the soul alone immediately receives, because as spirit it receives, and thus is subsisting subject both as "that" and not only as "by which".

To what is said about accidents remaining in the generated and corrupted, it has already been denied above and explained, q. 1, art. 7.

To the confirmation it is answered, that form concurs to inherence of accidents not as principle of receiving, which is potential, but of actuating, not indeed by constituting the accidents themselves with them some nature, but by information actuating matter, and because it gives substantial being which is first being and being simply, therefore it is the reason for terminating and sustaining secondary being, which is accidental being, since through substantial form subsisting being is provided; on which as on primary term inhering being depends, which is not in itself, but in another.

Secondly, it is argued: Accidents inhere in that subject, from whose potency substantial form is educed, but it is educed from matter alone, as is clear, therefore accidents inhere in matter alone. It is confirmed, because at least substantial generation, which is action, cannot have for subject the composite itself, but prime matter alone, because from it alone form is educed and united to it, and similarly the relation which matter has to form, and to God creating, and to other matter similar or dissimilar to itself, cannot be subjected except in matter itself, because they denominate it alone, and not the composite, therefore.

It is answered by denying the major. Nor is it an obstacle that accident disposing matter ought to be educed from the same subject, from which form is educed to which it disposes; for we say that it stands well for accident to be in the composite, and yet to determine and dispose matter, because accident to inhere when it inheres in the composite, through matter as principle "by which" of reception is received, and thus place is sufficiently given that it dispose matter itself, and be said to be educed from it as from principle "by which" of receiving, because just as in the composite accidents inhere through the potentiality of matter, through which they are received as through principle "by which", so from its potentiality in the same sense they are said to be educed, but from the composite simply as from subject "that".

To the confirmation it is answered as pertains to generation, that it is inherently in the whole generated composite, as in subject "that", on which it depends as a certain form in being, yet its exercise in the nature of eductive action only respects matter itself as subject of eduction. But as pertains to relation, whether of creation or rather concreation of matter to God, or of matter to form or to other matter, we say that some are, which have matter alone for foundation, like those related in the argument, yet they do not have it alone for subject of inherence, for the same reason is for relation, as for the remaining accidents, just as also relations founded in accidents themselves, for example, in whiteness, or action, although proximately they are founded in accidents, yet they inhere in the whole composite, as in underlying subject, so also relations, although founded in matter yet inhere in the whole, as underlying. But that they denominate matter alone, and not the composite by which they are sustained, does not remove that they inhere in the composite, and not in matter, because denomination happens in the subject according to application, and exercise in it; but it happens to be applied to one subject according to formality and respect of sustaining form in being, and thus it denominates the subject sustaining union, but to another it is applied according to exercise, and formality of extreme, or united part, and thus it does not denominate the united subject, because it is not a part, but matter. And so it is applied to diverse things and denominates according to diverse formality, and effect. Nor is it an obstacle, that relation is identified with foundation, and thus if the foundation does not inhere which is matter, neither ought relation to inhere, which is identified with it. For it is answered, that that, which is identified with another as a mode, can well depend in its being on the whole, and as to the formality of mode, which it superadds, inhere but as to the material, and identical, with which it is entitatively the same not inhere; but this is only materially, namely because that entity of which it is a mode does not inhere: just as sitting is not really distinguished from the one sitting, and yet the entity of the one sitting does not inhere, but the mode itself inheres, that is, depends in its being on the being of substance.

Thirdly, it is argued: For if accidents inhere in the whole and not in matter alone, it follows that they act for their own corruption, indeed the subject itself acts for its own corruption; the consequent is false, therefore the consequence is clear, because heat, for example, acts for the corruption of the water in which it is, therefore it acts per se for its own corruption since it acts per se for the corruption of its cause, which is water. And similarly water itself which is the subject, acts through heat received in it, for since heat is an active quality, and is in water, not it alone, but the subject operates through it, for it is the hot thing that heats, not heat; therefore if water is destroyed through heat, and water is the subject of heat, water acts for its own destruction. Likewise it would also follow, that hot water could not expel heat from itself, and reduce itself to coldness, it is impossible that the whole water be agent and patient, therefore the whole cannot be subject of heat, and the whole act on heat corrupting it. But if it is said that heat does not have itself as efficient power in water, but as disposition to the form of fire, then an instance is made, because accidents dispose matter to form, and not the composite, therefore they inhere in it, since they do not dispose except by inhering, and so just as they denominate matter disposed, so also sustaining such disposition. It is confirmed, because some motion can be continued in the corrupted, and in the generated, as when a dog falling from a tower dies in the middle, not discontinuing motion, therefore it cannot be subjected in the composite, because thus it would be discontinued.

It is answered by denying that heat, or hot water act effectively for their own corruption, because as we said above in question one from St. Thomas, an accident never [acts] effectively on its subject, but one part of the continuous acts on another, and one contiguous thing on another, and thus heat never destroys itself effectively, but that efficient which acts on the hot thing, or that part which acts on another, destroys that heat; and when one part acts on another, and multiplies heat, some say that water, or the subject in which it is multiplied only has itself as bearing not as principal cause producing. However it does not seem to be able to be understood, that the medium is bearing, unless it is also producing, because the same accident in number is not borne, nor passes from subject to subject, or from part to part, therefore accident is multiplied through its communication, and consequently through production, because it is a new and distinct accident. But if it produces, therefore it has itself as principal cause, because it assimilates the patient, or effect produced to that form through which one part acts on another, which is a sign of being principal cause in acting, because principal cause is that, to which immediately and per se the effect is assimilated, although because it is not proper accident, nor has root in such subject, but only participatively, and through mode of passing, it is said to have the mode of instrumental cause, as to the mode of having form, not as to the form itself had, which per se and principally is operative of another similar to itself, e.g. heat of heat. But to what is said about water reducing itself to coldness, we said in Physics VIII, q. 23 and above q. 5, a. 1, that that reduction happens from the generator through the form of water, because it is proper passion, which is always reduced to the generator itself as to efficient. But as pertains to dispositions, we have already said that in reality dispositions never inhere in matter alone, because in reality it is always informed by form, and thus there is always given a composite in which they inhere, because however they inhere through matter as principle "by which" of reception, therefore they are said to dispose and determine matter, but to be sustained by the composite itself.

To the confirmation we answered above q. 1, art. 7, that motion is not continuous on the part of the subject since that in which it was before is corrupted, but is discontinued in the instant itself of generation, although because it is discontinued only in that instant through negative rest, and not privative, it seems to be continued on the part of time.

Lastly, it is argued: Quantity follows matter as quality form, therefore at least quantity ought to inhere in matter, because if it follows matter it precedes form, and thus will be in matter alone, which especially as already said is verified in man, in whom quantity can in no way inhere in form which is spiritual, therefore in matter alone. And it is confirmed, because diverse forms are not received in the same matter, but in diverse, but it is diverse through division of quantity, therefore quantity is prior in matter as dividing, and affecting it, than that form be received. Finally, this seems to be the opinion of St. Thomas, because in IV Sent., dist. 12, q. 1, art. 2, q. 4, he teaches from Averroes, that it is necessary to understand indeterminate dimensions before the advent of substantial form, otherwise division of matter could not be understood, that in diverse parts of matter diverse substantial forms would be, similarly in Contra Gentiles IV, ch. 81, he says: "That the rational soul remains after death, matter also which was subject to such form, remains in the same dimensions, from which it had, that it was individual matter;" therefore according to St. Thomas matter according to itself is subject of quantity.

It is answered, that that axiom quantity follows matter, and quality form is understood thus, that it follows the composite by reason of matter, and quality by reason of form, whence it is not necessary that they be subjected except in the composite itself. Indeed it is not to be understood, that quantity follows bare matter without form, since it is clear that it follows the grade of corporeity, which is provided by form; but it is understood to follow matter, either because it is found only in material things, but quality follows act, even if it is immaterial, and thus it is proper to quality to qualify, as also to form; or also because quantity has itself in the genus of accidents as matter in the genus of substance, because it is not active, but receptive medium of other accidents, and among the rest first, which all express proportion and analogy to prime matter, and therefore it is said to follow it according to these conditions.

To the confirmation it is answered, diverse forms are received in diverse parts of matter, whether matter divided through quantity not existing before form, but accompanying it, and following it, like other dispositions, of which one and first is quantity, but nevertheless because dispositions as above in question one was treated at length, although in the genus of formal cause they follow form, yet in the genus of material cause by which they determine, and dispose matter they are pre-understood to form by priority of nature, or dependence, not existence, so quantity according as it is understood to divide matter, and adapt it to form, that so much matter and not more be subjected to form, thus is understood to precede form by precedence of nature, because thus it is considered through mode of material disposition, and thus is called indeterminate quantity under the precise reason by which it makes division, as we will say in article three, yet the same quantity as formed, and figured by its terms, follows form, and in reality and according to duration always exists with form, and dependently on it.

To [the authority of] St. Thomas we say, that in the first place he uses the opinion of the Commentator as to this that indeterminate quantity is pre-understood in matter by priority of nature, for that dimensions do not pre-exist in matter according to duration, St. Thomas expressly reproved in Averroes in Opusculum 32, ch. 4. In the second place St. Thomas speaks from supposition, and ad hominem against the Gentiles denying resurrection, whom he convinces from those things which they themselves conceded, namely that matter always has the same dimensions, as the Commentator said, thus Ferrara solves there and Bañez here q. 9, art. 3. However it can also be said, that matter is said by St. Thomas to remain under the same dimensions, insofar as it was subject to such form, that the sense be, that matter which as subjected to form under the same dimensions remains after death, not because the same dimensions remain, but because it was subjected to form under such dimensions, and order to those dimensions remains in matter, as also to form to which under them it was subjected, yet the dimensions themselves do not actually remain, but order to them. And this is because there a little after St. Thomas says that corporeity which is accidental form according to which body is said to be in the genus of quantity, yields to nothing when the human body is corrupted, therefore St. Thomas thinks that quantity does not remain in act, for this is corporeity which is accidental form.

ARTICLE II.
What must be done to an accident so that it remains separate from its subject?

We suppose that a real accident, which is truly and properly inherent, can be preserved separate from its subject, and we say an inherent accident, because a mode that is not really distinct from the subject, but is identified with it, is therefore not capable of existing separately from it, because if it were really separated, by that very fact it would have a being really distinct from the subject, because it is separate. Therefore, an accident, especially an absolute one, which is not a mode but really distinct, can be preserved by God without a subject, as is clear from the example of quantity, which in the Eucharist is preserved by God without the substance of bread and without any other subject of inherence. And furthermore, because the power of sustaining accidents belongs to substance not by informing the accident itself, but by joining it to its own being, and mediately terminating it as to the exercise of existence, not as to any information, or in the genus of formal cause giving species to the accident; and thus that conjunction to substance is ordered to this, that the accident be preserved in being, and actually exist not in itself, but in another, because it is not capable of existing in itself and through itself, like substance; since therefore it exists in another as in something extrinsic to itself so that it may be preserved in being, and have existence thus dependent and terminated, God can supply all this without such a sustaining cause, because all preservation of existence is done more excellently by the first efficient cause than by any created extrinsic cause, whether material or efficient, since it does this in virtue of the first cause, and thus with that removed, it can still be sustained in virtue of God, because that dependence on substance is only a dependence in existing, not in constituting the nature of the accident. However, if this effect were not only preservation in being, but some other formal effect, not pertaining precisely to the exercise of existence, but to some specification, or intrinsic formality, it could not be supplied by God alone as efficient cause, because an efficient cause supplies existence, which it properly regards and provides, but not specification, or any constitutive formality. And in this consists the reasoning of St. Thomas in Part III, q. 77, art. 1, that therefore God can preserve an accident without a subject, because an effect depends more on the first cause than on a second cause, and so with the second cause removed through which it was preserving the being of the accident, it can still preserve it by itself alone. Therefore God only supplies the effect of the second cause in that which is to preserve being, not in that which is to constitute, or to formalize as to specification. And so God does not supply the material cause by exercising the office of material or formal cause, but only that in which that cause was preservative of existence, in this He supplies through efficiency what that cause did through termination or sustentation.

But then there is a difficulty, what does God produce in the accident, and what happens in it, so that it is sustained in being by Him alone and without substance. In this matter, some think that some mode is added to the accident itself when it is sustained outside a subject, and is rendered existing per se. Cajetan insinuates this in Part III, q. 77, art. 1, although he speaks obscurely, and Suarez admits it to be probable in vol. III, part II, disp. 56, sect. 2. But Scotus holds the opposite view in IV, dist. 12, q. 1, as do M. Soto there and Nunno on the cited passage of St. Thomas.

NEVERTHELESS WE SAY: That the accident through separation does not acquire a new being, but the old one remains, as St. Thomas often affirms in the cited q. 77, especially in art. 1, ad 3, where he says: "That the accidents remain by divine power in that individuated being which they had before." And he is speaking of that which they had in the substance of bread and wine. The reason is that the Divine action preserving the being of accidents does not change their entity, otherwise it would not preserve the same thing, therefore it does not change their proper being, for this is not changed when the entity is unchanged, nor does it unite to them any extraneous existence, because it cannot be assigned what this would be, for it is not Divine, since the accidents are not united to God; nor can it be created, since there is no alien existence that is united to those accidents, nor can the existence of one created thing serve for another due to its limitation. Therefore the Divine action separating accidents is not productive of new being, but preservative of the old, although not with the old dependence.

Nor is it an obstacle if you say that the inherence of an accident and its existence are really the same, or at least inherence is the medium for receiving the existence of accidents, just as subsistence is the medium for receiving the existence of substance, therefore inherence cannot be removed unless existence is removed.

It is answered that inherence is a mode of existing distinct from the very existence of the accident, just as in substance subsistence is distinguished from existence, and thus existence can be separated from inherence, and remain without it, at least as a mode without a mode, because inherence is essentially a mode of dependence on a material and subjective cause only, or on a sustaining cause, while existence depends chiefly on the producer; and because God is principally the producer, He can preserve this without that. And from this the difference between the existence of substance and of accident is further evident, that the existence of substance is perfect existence, and per se, and gives first being, and thus per se requires and presupposes subsistence, which is the terminus of the whole, because that being first belongs to the whole, or terminus, not to the part, which has being dependently on the whole, and consequently presupposes the whole itself as prior. Hence when subsistence is removed, such substantial existence is removed, insofar as it is perfect existence and per se; for it does not belong to a part except as quo. But an accident does not have perfect and total existence, but one needing to be joined to another, so that it may be terminated there, and not fall away; hence such existence belongs to it prior to inherence, through which it is perfected, when it leans on another, and is rendered terminated, not like the existence of substance, which of itself demands not to lean on another, but to subsist per se. And so when the subject on which the accident leans is removed, God preserves without this leaning the very being which He was preserving.

SECONDLY I SAY: That it is not necessary to produce a new positive mode superadded to the separated accident, so that it may exist per se, but it suffices to preserve that being without that inherence, and thus only a privative mode follows, namely to exist without that dependence; just as for God to produce some effects in the nature of things by Himself alone, for example, health without medicine, and light without the sun, or a man without a generator, He does not need to place a new mode in the thing thus produced, but only with secondary causes removed to give them the being which He would give through such causes, therefore similarly to separate an accident it suffices with the secondary cause of that being removed to preserve it, therefore another new superadded mode is not required. And especially because that mode can be neither substantial nor accidental: not substantial, because it is not due to or proper to any substance, for to substance is due a mode of existing per se without aptitude for inherence, but that accident remains with an aptitude for inherence, and is only destitute of actual inherence, therefore it does not receive a substantial mode. Nor is it accidental, because an accidental mode cannot sustain outside a subject, and constitute with it from itself seeking a subject and respecting it by this very fact that it is accidental, and positively constituting the subject in an accidental mode of being, or proper to an accident; therefore it is not given, but only the continuation of existence with privation of dependence on a subject, just as when the soul is separated from the body, although it loses the positive mode of informing, yet it does not acquire a new mode except only a privative one; namely to exist without the body, and to have its being not communicated to the body.

But you will object: That concurrence of God by which accidents are sustained without a subject is not the same by which they were sustained before through the mediation of substance, but more perfect and efficacious, therefore it has a distinct terminus, and a distinct perfection in it, therefore either a new being, or a new mode.

Secondly, St. Thomas affirms in that q. 77, art. 1, ad 4, that separated quantity so has being that it is composed of that by which it is and that which it is, which it did not have before, and in art. 1, ad 2, he says that an accident receives the mode of substance, and in art. 1, that it receives the unity of substance, therefore it has something positive which it did not have before. Thirdly, it is more natural that when some mode is taken away, especially if it is a mode terminating being, another should succeed, just as when the termination of quantity as figure, or situation, where, is taken away, another mode succeeds, therefore when inherence is taken away, another mode succeeds and especially, because it is a nobler mode of existing separately, and without dependence on a subject, than with it, but to exist without dependence cannot be without something positive and not through the mere negation of dependence, therefore a fortiori the mode of existing separately from a subject. But if that per se existence is not some positive mode, the foundation for positing against Scotus that subsistence is a positive mode is evacuated. Finally, the concurrence by which an accident was preserved through matter was the same as the concurrence of the sustaining secondary cause itself, but now it is found without such concurrence of a secondary cause, and without eduction, and dependence on a subject, therefore it is distinct, and consequently has a distinct terminus in the accident itself.

To the first it is answered that that concurrence by which God preserves a separated accident is distinct from that preservative in a subject, not on the part of the thing produced, or superadded mode, but on the part of the mode of producing, insofar as that accident is preserved with a concurrence not identified with the sustentation of matter, but before it was preserved with a concurrence identified with such sustentation of the subject, but this diversity of mode of acting does not infer a new positive mode superadded to the thing produced itself, but it suffices that it takes away some dependence which it had before, for the same thing which God produces by concurring with another cause, He can produce by acting alone, as is clear in the examples adduced above, without producing a new mode, superadded to the thing produced itself.

To the second it is answered that St. Thomas does not explain that this mode, by which a separated accident exists, is a positive and superadded mode, but it suffices that it be privative, as has been explained. And when he says that a separated accident is composed of being and that which is, "that which is" does not import the essence of the accident with a positive mode, but the essence of the accident itself with the removal of inherence suffices, for thus it composes with its existence as that which is, that is, as an entity not actually existing in another, nor informing as quo, and consequently as quod, and for this the negation of inherence with the preservation of existence suffices, and consequently with composition with it. It is also said to have the mode or virtue of substance, not by receiving a positive mode, but by relinquishing inherence, in which it behaves like substance.

To the third it is answered that here too some mode succeeds the mode of inherence, but a privative not a positive one; for indeed a positive does not always succeed another positive, as is clear when a son dies another relation does not succeed to the father, but the privation of the relation, and darkness succeeds to light, and blindness to sight; why therefore could not the privation of it succeed to the mode of inherence? And when it is said that it is a nobler mode of existing in a separated accident, I answer that it is nobler through the removal of actual dependence which is a certain imperfection, not through a superadded mode positively demanding that perfection like the mode of substance, which has intrinsic per se existence: thus God's concurrence preserving in this way is more perfect, insofar as it acts per se without a secondary cause, not because it produces a more perfect effect, or mode as shown in the above examples, and just as the rational soul from separation has a more perfect state of being than when existing in matter, insofar as it is in some way weighed down by it, and materialized, yet it need not acquire a new positive mode. As for what is added about substance itself, it is answered that substance not only has the negation of actually depending, but it does not have the capacity, nor aptitude for inherence, and so it must have a mode of thus existing, which excludes all potency of depending, not only that actual dependence is removed, but in an accident only actual inherence is removed; hence in it an actual privation without a positive mode suffices; but in substance a positive mode is required, because from within it renders it incapable of inherence.

To the last we have already said that the divine concurrence by which an accident is sustained is distinct from that by which it sustained through the mediation of a subject, because it is not identified with it, but operates with that removed, yet it does not follow that it produces a new positive mode, but the same being with the removal of dependence on a secondary cause, as has been explained.

ARTICLE III.

From what principle is the individuation of material substance taken?

For clearer knowledge of the terms, it is necessary to suppose what individuation formally is in substance, what its principle is, and what its terminus. Individuation therefore can be considered metaphysically, logically, and physically. Metaphysically it says the ultimate grade in the series of any predicament, just as the highest genus says the first grade; and this ultimate grade is made through the ultimate difference, which is individual contracting the species. Logically it says the relation of subjectibility to superior predicates, and predicability of only one, that is, of itself, and both are second intentions. Physically it is numerical unity itself, by which something is so one that it is indivisible in itself and divided from any other, as St. Thomas defines it in Part I, q. 29, art. 4. And so insofar as it says incommunicable unity and further undivided it says individuation, as in only one; insofar as it says divided from any other, it supposes or admits individual multiplication, so that one individual is divided and separated even from any individual constituted under the same species, if it is given. Hence in this difficulty we cannot speak of the individuation of material substance without also speaking of its multiplication, and we assign the reason for both.

The principle of individuation is called that foundation or root from which this unity thus undivided or further indivisible into many is taken, and divided from any other even of similar individual unity. And we inquire whether it is taken from the constitutive and proper principles of the nature itself, or rather from something that is outside the concept of nature and quiddity. For it is necessary that two conditions concur for individuation to be multiplied; first, that what individuates pertains to substance and makes substantial unity, since indeed the individual of substance also pertains to the predicament of substance, as the ultimate in its line; second, that it so multiplies substance substantially, that it does not do so essentially or formally, because individual distinction is not opposed to formal unity, insofar as it is specific, but preserves the whole species and quiddity in one individual and in another, but does not make formal specific and quidditative distinction.

The terminus of individuation is subsistence or suppositality, which per se is found only in substantial individuals, which are terminated per se and subsist per se in being; but accidents do not have termination and subsistence in themselves, but are rendered terminated through inherence to a subsisting thing. And substance is not individuated through this terminus, but is modified or terminated through it, insofar as it is rendered incommunicable to a further suppositum, for we see that the humanity of Christ the Lord does not have its own subsistence, and yet it has its own singularity, because it was assumed as singular and distinct from other natures, but was not singularized through the Word itself.

From which it arises that since subsistence behaves as a terminus and ultimate mode of substance, it is not repugnant that from the same singular nature, if its proper subsistence is impeded or removed, afterwards another numerically diverse from the prior one flows without any division of singularity, just as from the same numerical quantity if the surface or terminating point is removed another will flow, thus from the same numerical nature even if it is not multipliable, because it is singular, whether it be corporeal or incorporeal, those multiple subsistences thus succeeding will flow, and are contained under the same order to the individuating principle, because it flows from the same principles in virtue of the first generation, which so produced this singular nature under this numerical subsistence, that if it were impeded another would succeed in place of it, all of which are reckoned as one mode under such singular nature, and its principles and generation, and so this diverse succession does not multiply nature, since indeed it belongs to the same singular nature, whether it be material or immaterial. Although in this the opinion can stick, and not improbably be defended, that from a single and singular nature only a single proper subsistence can emanate, so that if it once had its own, and that is impeded through hypostatic assumption, if such a nature is again dismissed, another subsistence will not emanate, but the substance will perish, because subsistence and existence do not behave like proper passions, which suppose existing nature, do not pertain to constituting existence, like the terminus of subsistence and existence, which being removed nature perishes and ceases, just as also when the motion of the heart ceases, another cannot emanate, because nature perishes, much less therefore will existence or subsistence once removed flow. But if its own subsistence never emanated, as now in the humanity of Christ, which never had its own subsistence, if it were dismissed, it would emanate in virtue of the first generation.

Various opinions.

Concerning the principle of individuation therefore there are various opinions of philosophers, which variety has arisen from this, that many things are required for singularity which do not seem to be able to be reduced to one root and principle. For in individuation we find unity, and thus it seems to follow entity; we find also division from any other, and thus it seems to follow quantity; we find that it is the ultimate grade in the predicamental series, and thus it seems to follow the same form, to which other grades follow; we find that it does not constitute a quidditative grade, nor make differ essentially, since all individuals are of the same nature, and thus it seems to follow accidents, which are outside quiddity. Finally, the individual has incommunicability, because it is not common, nor communicable to many, and thus it seems to follow matter.

From these, diverse opinions have been derived, which are principally reduced to four. The first affirms that each thing is individuated by itself and from its own entity, and just as it has formal unity by itself, and all unity is a passion of being, therefore it posits entity itself as the principle of individuation. Thus P. Suarez holds in disp. 5 Met. sect. 4, and for it other ancients are cited, as Niphus, Zimara, Avicenna, Averroes, and others.

The second opinion by another extreme is that of Scotus, who seeing that individuation does not add a quidditative predicate, nor make differ quidditatively, said that individuation is made through something distinct, and as if extrinsically coming to nature, which he called haecceity, whose formal effect is to render nature indivisible into subjective parts. Nor is it necessary to seek within nature the principle of singularity, but only in nature is there potency and indifference, that it be this or that, but through the addition of extrinsic entity this must be made, just as through entity coming from without, which is predetermination, the indifference of operating potency is determined, that according to its singular mode it may operate a certain effect, and just as through the addition of existence essence itself is rendered actually existing. Thus it is taken from Scotus in II, dist. 3, q. 6.

The third opinion attending to the division which individuation makes within the same species, and because it is act which distinguishes, assigns some form as the principle of individuation. Some the substantial form, which is attributed to Averroes in 1 De Anima, ch. 7, and to Avicenna in book 6 of natural things, part 1, others quantity which Scotus in the cited place, q. 4 attributes to Godfrey, and in part Soncinas in 7 Met. q. 34, Ferrara in 1 Contra Gentes ch. 21, Capreolus in II, dist. 3, q. 1 follow, insofar as of the two things which are required for individuation, namely that it be incommunicable to many, and numerically distinct from others, they attribute this second to quantity, and St. Thomas favors this in IV, dist. 11, q. 1, art. 1, q. 1 ad 3, and in other places to be cited later.

The fourth opinion attending to the proper mode of individuation and singularity, which is incommunicability, affirms that prime matter is the principle of individuation, that is, the ultimate incommunicable subject. But since matter of itself is pure potency, and indifferent to multiple individuals, indeed to multiple species, but individuation supposes specific nature constituted, therefore some assigned as the principle of individuation matter as informed by substantial form, because it is act which distinguishes. But others posit matter, as designated by quantity, or with order to quantity to be the principle of individuation, which St. Thomas frequently says and the Thomists follow. Among whom however there is great variety in declaring this designation of quantity, whether it is quantity itself as actually informing matter, or rather radically pre-had in matter, or only as connoted, and included by way of condition; about which we will treat later. Nor were there lacking those who assigned subsistence and existence as the principle of individuation, as Scotus reports in the cited place, q. 3, because they have the nature of ultimate incommunicable terminus.

Resolution.

I SAY FIRST: The specific nature cannot, from its entity alone which precisely includes quidditative predicates, be the adequate principle of individuation. And so the entity and essence of a thing by itself and without any other order, or extrinsic superaddition, is not the principle of individuation. Here we speak of entity only according to its quidditative predicates, and not according to all other things which it concerns in reality, for thus it includes matter itself and quantity and accidents, and so there is no doubt that it has in itself the principle of individuation; for which reason St. Thomas said in Part I, q. 29, art. 1, that substance is individuated by itself, but accidents from the subject, because substance includes within its entity that by which it is individuated, just as it includes that by which it subsists, but an accident requires another being besides itself, that it may exist and be individuated, because it exists not in itself, but in another.

This conclusion is gathered from the same places of St. Thomas and Aristotle, by which we will later show that the principle of individuation is taken from matter designated by quantity, and therefore they will be adduced below. But the foundation is taken first, because for the individuation of a material thing not only is unity undivided in itself required, but also divided from any other individual within the same species, for since material nature is capable of multiple individuals, it is necessary that the principle of individuation be sufficient to distinguish not only from an individual of another species, but also of its own, therefore it is necessary that individuation flow from such a principle, which is a principle of substantial distinction, and not essential, or formal, because namely it is not opposed to, nor destroys formal unity, since indeed through individual differences individuals do not differ quidditatively and formally, but agree in the same essence and nature of atomic species, therefore that distinction will make only a material difference, since it is not opposed to formal unity, nor does it take it away;

but that is specific and formal distinction which is founded in the very division of form as form is, that is, in the very contrariety of forms, which arises from the intimacies of form, insofar as one form has opposition with another, as St. Thomas notes in 10 Met. lect. 11, therefore individuation or individual difference cannot arise from entity itself, according to some quidditative or formal, and essential predicate, because thus such division should effect, that one essential predicate would be in one individual and not in another, which would be to take away individual distinction and make specific, therefore it cannot arise from quidditative, and essential predicates, so that there is in one individual one quidditative predicate, and not in another, therefore it is necessary to reduce this to some principle, which indeed pertains to the substance of the thing, yet does not make essential and formal division, therefore it will make only material, because it is not formal, although it divides forms themselves and quiddities materially, and so it cannot proceed from the entity of form, as it constitutes formal and essential unity, and does the office of form, but insofar as something is joined to it, which without formal distinction makes distinction of forms, that is, that forms themselves are distinguished, but not by force of formal and essential reason, therefore from some reason besides the essential, but all that is the entity of form and nature, is essential reason, because it pertains to the quidditative concept of such entity, therefore from the sole precise concept of entity, without something joined outside the concept of essence there is not a principle whence individual diversity arises, wherefore it is necessary to assign for the principle of such numerical division something which is substance, yet does not concur to making formal distinction, but only material, because individuals differ substantially, as diverse substances, and not essentially or formally, just as integral parts differ as substantial parts, but not as essentially pertaining to the composite, because without any or some of them, the essence of the composite is saved.

But if you say: That to be an individual is an intrinsic and essential predicate to the composite itself, because by way of a whole it is placed in the predicament, and thus it ought to include also the ultimate grade itself of individuation, of which all superior predicates are predicated, therefore individuation ought to arise from intrinsic principles, it is answered that the individual is something intrinsic by way of terminating, and modifying, or by way of subject rather than predicate, since indeed it is that which is subjected to all superior predicates; hence it pertains to the thing by way of constituting the subject, not nature, and by way of modifying quiddity. Nor is it required that it arise from essential principles, like proper passions, but it suffices that it be fitting through intrinsic denomination, and as intrinsic modification, and according to that which pertains to the state of the thing, more than to intrinsic entity, and constitution. This state, however, and this mode so befits the thing, that it says order, and connotation to some extrinsic conditions, and does not befit altogether absolutely extrinsic quiddity.

Second, the conclusion is proved, because individual unity insofar as individual, and similarly individual multiplication does not befit nature, neither in the first, nor in the second mode per se, although it befits in the third, which is not a mode of predicating, but of existing, just as neither is the fourth mode per se of predicating but of causing. If therefore it does not befit nature, neither in the first mode of saying per se, nor in the second, in order that it may befit it, it will need some principle outside nature, which is the reason for befitting, and thus not every entity or quiddity considered according to itself is the principle and root of distinction, and numerical unity. The consequence is clear, because what does not befit something from proper and intimate connection, therefore befits through another, because in its intrinsic reason there is not a sufficient principle of befitting. But the antecedent is proved, because what befits something per se, befits all, for all that is per se, is of all, as Aristotle teaches in the first Posterior Analytics and all Logicians commonly, but it is clear, that singularity is not said of all, since indeed without this or that determinate singularity, nature and its whole quidditative concept is found, therefore that it be this singularity in such a nature, does not befit it per se, nor of all, but through another which is outside the concept of nature.

You will respond first, that singularity vaguely, essentially and intrinsically befits nature, since indeed every nature by this very fact that it is real, ought to be singular; and this suffices, that it be said to befit per se, so that it does not need another principle that it may befit, although singularity as determinate and this does not befit per se, but through another, because through another it is determined. Second, that given that it needs another principle besides nature that it may befit, that will be the efficient itself, through which it is produced in the nature of things, and becomes a real entity or outside causes, and so becomes singular, but it does not need another formal or radical principle, besides nature itself, and the entity of the thing.

But against the first solution it is urged, that in the present we do not inquire about the principle of individuation in common and vaguely, but determinately, and according to the ultimate determinative as it is rendered this, and is discerned from every other individual in singular, therefore impertinently recourse is had to the vague individual, but it is necessary to assign a principle ultimately determining even the vague individual, that it be this determinately: just as it stands well that something befit per se vaguely, and according to disjunction to something, as to quantity to have some figure or where, and yet this figure, or this where determinately does not befit it per se, and thus it always remains to assign a principle, and reason, on account of which such determinate individuation, or figure, or where befits, granted that in common and vaguely it is respected per se; for just as vague and common individuation seeks individuating principles in common, so determinate individuation, determinate principles; and these it is necessary to assign, for entity alone according to itself is common to this or that individuation.

But against the second solution, which we will also impugn below, it is urged, both because the efficient cause equally respects nature and its individuation, for it produces both, therefore of itself it is not the proper principle of individuation as it is distinguished from nature; and because the efficient cause is only executive, and giving being outside causes, according to what each thing seeks according to its exigency, therefore the efficient cannot be the intrinsic reason and foundation or principle on account of which something befits something, but supposing the reason of befitting, it pertains to the efficient only to place that in being; and just as in nature itself there ought to be given an intrinsic principle of all predicates, which befit it; but the efficient is only an extrinsic cause producing, and giving being, so there ought to be assigned an intrinsic principle of individuation and not only an extrinsic cause producing, and that is what we inquire about, and so we do not deny the efficient to be a principle of individuation, but extrinsic and executive, not intrinsic and formal intrinsically determining the indifference of nature, that it be individuated by this rather than that individuation, and thus from the efficient individuation is taken executively, and as from a principle placing it in being outside causes, but not as from an extrinsic formal principle; hence also the efficient is productive of multiple individuations or individuals and not only the reason of one individuation only.

Third, the conclusion is proved by destroying the foundations of Suarez. First, because unity is a passion of being, therefore to real entity through itself follows real unity, but this necessarily is singular, because in reality abstract unity is not given, hence by this very fact, that it is placed in the nature of things without another addition it becomes singular, therefore transcendent unity insofar as real ought to coincide with numerical. Second, because individuation pertains to the line of predicament, and to the metaphysical grade, since indeed of the individual other superior predicates are predicated, but all metaphysical grades flow from the same entity and form, and befit it by themselves, therefore just as other grades come from the same entity, and are not distinguished in reality, but only through the intellect, so also individuation, and so it will not need another superadded thing to have this individuation and unity, but just as by itself it is real entity, so by itself it is real and singular unity. Third, because individuation does not depend on accidents, as on a principle, because accidents cannot be the principle of substantial unity, and accidents can be varied, even quantity itself, with the individuation of nature and substance not varied, therefore individuation is not taken from accidents: nor also from matter, because this is potential, and indifferent to multiple specific forms, therefore also to multiple individual ones, therefore it itself will need to be individuated from another principle, but will not be the principle of individuation. But if it does not need, but is individuated by itself, although however it is common and specific, why also will other substantial natures, although of themselves common, not be individuated by themselves? And on the other hand form is what distinguishes, and is in act per se, and not indifferent, and in potency, therefore rather it itself will be the principle of individuation.

To the first it is answered, that unity is a passion of being, and follows the whole being, but according to diverse considerations of unity it follows diverse considerations of being, for as it is formal, and specific unity it follows entity on the part of form, and actuality, but as that unity is incommunicable, and individual, it follows entity, as it has in itself the principle of incommunicability. And so if it is material nature which by reason of matter has incommunicability, unity as individual follows unity by reason of matter as it is the principle of incommunicability. And just as common and universal unity follows entity itself, as it is in the state of abstraction, and that state not removed, so unity as individual, because it pertains to the state of contraction follows entity not absolutely, but as it is in such state of contraction, and incommunicability which it has by reason of matter. And so to real entity follows real unity but according to the mode, and state of entity follows the mode and state of unity, for that it be singular, or universal unity, or formal, and specific unity follows entity not absolutely, and considered according to itself, but as it is under such state and mode. And when it is said that nature by this very fact that it is placed in reality is not universal, but singular, it is answered that by this very fact that it is placed in reality, it is not placed naked, and absolute from every circumstance, and state of incommunicability, but with it, and so singular and individual unity is rendered, not by reason of entity absolutely taken, but circumstanced, and incommunicable. And so it is one thing, that nature placed in reality is singular, another from what principle, and root it has that it be singular and this, and although nature according to itself is negative indifference, yet that indifference ought to be taken away not through an essential principle, but through one modifying essence, because that indifference is only that nature be modified, and materialized through singularity, and individuation, but not that it be further quidditatively constituted.

To the second it is answered, that individuation pertains to the metaphysical grade not as a constitutive, and quidditative predicate, but modifying, and pertaining to the state of nature, hence it has more the nature of subject, than of predicate, because it is ultimate, to which others inhere. But individuation is taken from the same entity, from which the other grades, but not under the same respect, but connoting some accidents on which individuation depends. Nor is it understood to be taken from the same entity, that is, from partial form, from which other grades are taken, and not from matter, for it suffices that it be taken from the same total form, for example, from humanity which also includes matter, or the principle of incommunicability, and under this respect of entity, or form, not as it says constitution of quiddity, but as it says reason, and respect of incommunicability the individual grade is taken, and so it does not come totally extrinsically, as against Scotus we will soon say, but from entity itself, from which the other grades are taken under diverse respect, however, and connotation of something extrinsic. But to verify some predication, it is not necessary, that some things be identified from every part, and every way, but material identification suffices, as is clear in accidental predicates, as when it is said body is white, for they are identified by reason of the suppositum having whiteness, as St. Thomas teaches in Part I, q. 13, art. 12.

To the third it is answered, that substantial individuation is not made from accidents, as from formal reason, and principle, or proper root, but as from required conditions, that individuation be exercised, as we will say later, and is taken from the definition of Porphyry, when he says: "That the individual is that whose collection of properties is not in another." But matter is the principle, and root of this individuation, not insofar as it is in potency, and indifferent to multiple forms, for thus rather it is the principle of genus, which is a potential whole, but it is called the principle of individuation, insofar as it is the ultimate subject, beyond which communication is not made, and so it renders forms themselves, and the whole entity not communicable to many, which is proper to the individual, which is not common to many, and so the principle of not communicating is the principle of individuating. Hence it is clear that matter according to diverse considerations, is both the reason for having commonness, and individuation; commonness indeed, insofar as it is indifferent; and common to multiple forms, but individuation, insofar as it is the principle of not communicating to other subjects, or parts of matter, insofar as it is the ultimate subject. But yet it does not exercise this incommunicability among parts of matter except with separation supposed, and division, which is made through the designation of quantity as through a required condition, as we will soon say. But as to what is said, that the same matter is individuated by itself, we say that it is individuated by itself, as the principle of individuation of the whole, and consequently also of itself, hence the same matter in number is not found positively under diverse forms, but negatively, for matter of itself, all form removed does not have positive, and individuated unity, but indifferent to forms, and to their individuations, yet it is the principle of individuating with order to the designation of accidents where matter passes from one form to another. And matter indeed remains the same according to itself, that is, according to the nature of its potentiality, yet not with the same designation of quantity and accidents, and so it does not remain positively individuated from itself, although in reality it always has this, but of itself it is only the principle of individuation. And so St. Thomas says in 1 De Gen. lect. 9, at the end: "That the matter of those things which are transmuted is in some way the same, in some way other, for it is the same in subject, but not according to being, because it receives another nature, and another being according as it is under diverse forms, and according as it is ordered to diverse forms."

Finally, to that which is said that form is the principle of individuation, because act is what distinguishes, it is answered that act is what distinguishes formally, but the mode of distinguishing materially, and incommunicably, is on the part of matter, as from a principle, supposing however that matter is in act through form, because without form individuation is not given in act, but this is required concomitantly, and on account of existence, not because form is the root, or proper reason of individuation, as it precisely says the mode of individual distinction, about which we will soon say more.

I SAY SECONDLY: A haecceity coming totally from outside to substance, and not coming from some intrinsic material principle, cannot be assigned as the principle of individuation. In this conclusion we exclude the opinion of Scotus. And it should be noted that haecceity can be taken in two ways; in one way as the same as individual difference, or numerical unity, which formally constitutes and renders nature this and singular, and so there is no doubt that haecceity is given, for if the formal effect of haecceity or individual difference is given, namely to be this, what wonder that haecceity is given, which is the form itself, or individual difference? But if Scotus wished to say no more than that nature is rendered individual formally through individual difference, it is most true, nor does anyone contradict him; but then he does not touch the point of difficulty, because in the present we suppose that individual difference is given, but we inquire about the principle of such individuation or unity, because since all metaphysical grades and quidditative predicates come from a single form, the difficulty remains whether the individual grade, which does not constitute quiddity by reason of quiddity, but in the nature of modifying and incommunicable unity, lest it be predicated of many, also comes from the same form, or from matter, or from what. But if he intends haecceity to be not only individual difference, but that there is no other principle of individuation within the entity itself from which that haecceity comes, but that it is a form coming from outside, like whiteness or some other similar accident, in this we contradict him. And the reason is that that entity which is called haecceity is either substantial or accidental. Not accidental, both because it constitutes a substantial individual or first substance in the line and predicament of substance, therefore it cannot be an accidental entity; and because it is neither a proper nor a common accident; not proper, because this flows from the principles of nature, and so befits every such nature, but individuation does not befit every nature, but only one individual; not common, because this can be present and absent, or varied without corruption of the subject, but the principle of individuation, or that haecceity cannot be present without corruption of this individual subject. But if it is a substantial entity, therefore it is founded in some substance, and befits by reason of it, because it is either a substantial entity or a mode; if an entity, it is not distinguished from the thing itself, which is substance, and so does not come from outside, but is the same as the entity, which is to decline into another extreme opinion; but if it is a substantial mode, it is founded and originates in substance itself, otherwise it would not be substantial if it did not affect substance substantially, nor would it be natural if it did not originate from natural substance itself, since indeed a natural mode is identified with substance and proportioned to it, therefore it originates from it, or it will be necessary to assign another substantial principle from which it originates, and so individuation will be of that, but not of another, from which it does not originate, and so it is necessarily to be posited for the principle of haecceity and singularity something within substance itself, and this we say is matter, but not haecceity coming only from outside.

You will say: It suffices that this substantial mode come from an extrinsic efficient, but not have for its principle substance itself, or its matter; both because sometimes a substantial mode can come from outside, as the mode of transubstantiation, or substantial union, which comes only from the efficient; and because we require physical predetermination in subordinate efficient causes, that they be determined to produce an individual, since of themselves they are indifferent to many, and yet that predetermination is totally from outside, namely from the first cause and does not arise, nor is founded in the operating subject itself, as in its principle, therefore neither does haecceity.

It is answered that this mode of singularity, like nature itself, ought to come from an extrinsic efficient in the genus of effective cause, and by way of executing, with which however it stands, that it requires for radical and fundamental principle something holding itself on the part of the subject, for the efficient does not produce the effect in being, except according to the principles on which it depends, and according to the proportion of its foundation from which it arises, and is founded, just as proper passions also are produced by the efficient, dependently however on the nature from which they originate and are derived, and similarly existence and subsistence proceed from the efficient itself, but yet according to the principles of the nature of which they are, nor yet are existence and subsistence themselves principles of individuation, as we have already said above, but terms, and complement, hence natural individuation is given in the humanity of Christ, yet it does not arise from natural subsistence. But concerning the mode of transubstantiation, or hypostatic union if it is given, some principle is not to be posited in nature, because they are not natural, but supernatural. But as to what is said about predetermination, it is answered that it can be considered either entitatively, as it is a thing individuable in itself and so is individuated by the subject, like the rest of accidents, or inherent modes about which we will speak below. But if it is considered under the precise notion of efficient, and in its line insofar as it is the ultimate application of the inferior cause to act from subordination to the superior, on which it depends in acting, so it necessarily ought to come from outside, and not have another principle than the superior efficient, because its proper notion consists in this alone that it is the determination and application of the efficient. But substance that it be individuated in itself formally ought also to depend on the material cause, and on the principles of nature, which it individuates, although insofar as it is an effect to be produced, it ought to depend on and be made by the efficient cause.

I SAY THIRDLY: The first and radical principle of individuation cannot be substantial form, nor accidental, although it is required for it. Concerning substantial form St. Thomas often teaches this saying that it is not this and singular through itself, but from the matter to which it is joined, or from order to it, as can be specially seen in II Contra Gentes ch. 93, reason 2, where he says: "That difference which proceeds from form induces diversity of species, but that which is from matter induces diversity according to number." And in 10 Met. lect. 11, "Whatever contrarieties," he says, "are in reason, that is, on the part of form, make differ in species, but those which are on the part of matter, which are proper to the individual, which is accepted with matter, do not make differ in species." And finally St. Thomas holds it for a common principle, that no form, or nature multiplies number, except in diversity of matter, as can be seen in II, dist. 2, q. 1, a. 4, and in Part I, q. 50, art. 4, and in De Ente et Essentia ch. 6. But the reason and foundation is that form as form is the principle of species, therefore it is the principle of something communicable to many, or common to many, therefore as it stands under the concept of form, it is not the principle of individuation, but it is necessary that it put on another principle than that of form, namely the nature of incommunicable to many, which if form has of itself, it will be immaterial form, not informing matter, but if it does not have this of itself, but from matter, because it is communicated to it, it will be individuated from matter. Hence this reason is strengthened, because the principle of individuation ought virtually and in root to contain that which individuation itself formally, but the individual is that which is not communicable to many, but can be predicated of only one, therefore the principle of such individuation ought to be the principle of such incommunicability to many, but form as form is not the principle of incommunicability nor of unity as individual, but as formal, and specific, and as common to many, for since form by force of form is not receiving, but receivable, from the very notion of form it is communicable, because to be received is to be communicated, and so of itself it imports the concept of communication to others, in which it may be received, and consequently to which it is compared as to inferiors, and subjects to itself. But matter is receiving, and therefore is not communicated to another as inferior and subject to itself, but if it is communicated to form it is rather as the extreme to which forms communicate themselves, than the extreme which is communicated, for it is not that which is received, but that in which it is received, and to which communication is made, just as we do not properly say humanity communicated to the Word, but the Word to humanity, nor vessel to liquid, or man to grace, but grace to man, and liquid to vessel. Finally, because form is the principle of difference and formal distinction, but the distinction of individuals is material, therefore it has for foundation matter rather than form. The minor is clear, because two individuals do not differ quidditatively, although they are substances, because all quidditative predicates which are in one, are in the other, otherwise they would not participate in the lowest and ultimate species, if they disagreed in some quidditative and essential predicate, because this would pertain to nature itself, and species, for quiddity and nature is the species of the thing, and those which differ in quiddity, differ in species, therefore if two individuals agree in the lowest species, they agree in all quidditative and specific predicates, and consequently do not differ among themselves in any quidditative predicate.

Wherefore just as we see that integral parts do not differ essentially, since indeed they participate in the same form, but materially, although substantially; so also individuals, because for some things to become individuals, it suffices to divide integral parts, and dissolve their continuity, therefore if when they are continuous they do not differ essentially, neither when they are discontinued, because discontinuation alone does not import some essential and quidditative predicate making difference, but only matter and division, and consequently does not make formal division, although it makes division of form, and substance, therefore it is necessary that this distinction does not come from form itself according as it does the office of form, that is, as it gives formal effect by dividing, and distinguishing formally, but from something other than form, for to divide, or distinguish form, and not according to formal distinction, is to distinguish form not according as it does the office of form, but according to something joined to it which is not form, or not exercising the office of form. But just as matter cannot be the principle of formal distinction, although it receives it, so conversely, although form is divided according to non-formal distinction, and participates in it, yet it cannot come from form itself as from a principle, but from another part, which is matter.

But the second part of the conclusion, namely concerning accidental form, is manifestly taught by St. Thomas in opusc. 70, q. 4, a. 2, and opusc. 15, ch. 7, and opusc. 29, and 7 Met. lect. 5, and in IV, dist. 12, q. 1, a. 2, quaestiunc. 3 ad 3. And the reason is manifest, because the individuation of material substances, and their distinction is substantial, therefore it is necessary that its proper and radical principle be substantial, for indeed accidents cannot be the first root of substantial distinction, but always that which is substantial is to be reduced to substance as to a root, therefore since the individuation of substance is something pertaining to the line itself, and predicament of substance, it is necessary that it be reduced to something substantial as to the ultimate root. Then, because the first principle of individuation ought to be the principle of incommunicability to something inferior to itself, but quantity, and the rest of accidents are of themselves communicable as forms, therefore they cannot be the first principle of incommunicability in substance, indeed rather quantity itself, and accidents need individuation in themselves, and have it from the subject as we will say in article five, therefore they are not the radical principle of individuation, although they can serve for it as a condition. Objections against this resolution will be posed in the following article.

ARTICLE IV.

What is matter designated by quantity, which is the principle of individuation?

The express opinion of St. Thomas in countless places is that matter designated by quantity is the first principle of individuation, and this can be seen especially in opusculum 29, opusculum 32, opusculum 15 chapter 7, opusculum 70 question 4 article 2, in book 4 distinction 12 question 1 article 2 reply to objection 3, in part 3 question 77 article 7, in part 1 question 29 article 1, in De Ente et Essentia chapter 6, and in Metaphysics book 7 lesson 15. The foundation is taken from what was said in the preceding article where we showed that individuation implies unity, not in just any way, but with the mode of incommunicability to inferiors; similarly, individual multiplication in substance requires those two conditions, namely that it makes a substantial distinction, and not an essential one: all of which cannot come from form insofar as it exercises the office of form, but can indeed come from matter, not under indifference and potentiality, but as determined and designated, as we will soon say. And moreover it is proven from Aristotle, because in Metaphysics book 5 text 11, and book 10 text 25, and in other places he expressly affirms that those things are one in number whose matter is one, while those that differ according to contrariety and distinction of form differ in species. He also expressly proves in Metaphysics book 12 text 49 that God is one in number because He lacks matter, and whatever things are many in number have matter. This authority greatly pressures the authors of the opposite opinion and some, like Scotus, say that the Philosopher is not speaking of matter properly so-called, but of haecceity. But Vazquez in the second volume, first part, disputation 181, admits that Aristotle is speaking of prime matter, but does not respond to Aristotle's passage, nor does Fr. Suarez respond to it in book 1 on Angels, chapter 15, and in Metaphysical Disputation 5, section 2, from number 23, but to other passages of Aristotle in which we do not place so much emphasis, hence we need not press the authority of the Philosopher against them.

Against Scotus' interpretation we urge that if by the name of matter the Philosopher understood haecceity, when he proves that God is one in number because He lacks matter, the sense would be that He is one because He lacks haecceity, which is absurd, for thus without haecceity He would be one in number. Or if it is understood that God is therefore one in number because He does not have matter but haecceity in place of matter, it begs the question, for since haecceity is the numerical and individual difference itself, the sense would be that God is one in number because He is one in number, or that He is not numerically multipliable because He does not have multiple haecceities, which is begging the question, for it is asked about this why He does not have haecceities and numerical differences. Secondly, because the Philosopher proves that God is one in number because He lacks matter, such that He is spiritual and immaterial, therefore he is speaking of that matter by whose lack something is rendered spiritual and immaterial, but something is rendered spiritual and immaterial by the lack of prime matter, or corporeal matter, not of haecceity, therefore the Philosopher is speaking of this when he says that God is one in number because He does not have matter. The minor is clear, because by the lack of haecceity something is called universal, not spiritual, nor pure act; but God is said to lack that matter which if He had He would not be spiritual, nor pure act, therefore by reason of the lack of such matter something is said not to be multiplied in number. And it should be noted that these proofs of the Philosophers by which they prove the unity of God, or His perfection, are not to be despised, but explained, because through them they knew the true God. But the Apostle testifies in Romans 1: "For although they knew God, they did not glorify Him as God." But if the proofs which they offer to prove the unity of God, and other similar things, are not valid, it follows that they did not know the true God, who is one.

I SAY SECONDLY: The designation of matter is not done formally by quantity itself as by a form inhering in matter and affecting it, but it is done by the intrinsic order of matter to quantity, as to a form dividing and separating, and thus quantity is rather the term of the designation of matter to which it says an order, than a form intrinsically designating, and in this way it is said to be as a condition and connotation of individuation, and in its own genus namely as a condition, quantity is first, although matter is the first and radical principle of individuation. And so matter designated by quantity is the same as matter ordered to quantity as dividing, which division although it is not done without the information of quantity, and quantity as a certain disposition flows from the form, nevertheless under the aspect of dividing it precedes in the genus of material cause the form itself, as has often been said about dispositions, although in the genus of formal cause it is the reverse.

In explaining this conclusion Thomists vary sufficiently, for since in the individual two things are found, because it is both an incommunicable unity to many, and a division or separation from another individual, some say that matter and quantity concur to both, the former as the ultimate incommunicable subject, the latter as the dividing and separating form, yet in such a way that quantity concurs as actually informing, because thus it actually divides. Thus Ferrara in Contra Gentiles book 1 chapter 27, and Soncinas in Metaphysics 7 question 34, and others. But some posit matter as ordered to this quantity, not as informed by it, to be the principle of individuation. But they are divided, because some understand matter to be determined to this quantity through some superadded substantial mode, which is as it were the determination and designation of matter in order to quantity. But others simply say that matter itself is designated, not by quantity itself actually informing, nor by a superadded substantial mode by which it is determined, but by the very order and relation by which it regards such quantity.

But that we may explain our sense among these varieties, we say that in matter "to be designated" can say two things. In one way that which is to be noted and designated, which pertains as it were to the manifestation and appearance of designation with respect to us. In another way "designated" is the same as enclosed and rendered incommunicable even with respect to other matter and individuals, and this supposes separation and division from another with enclosure in itself. And in the first way there is no doubt that matter is designated by quantity itself as informing, and by the other accidents, for these render matter sensible and designable to us, but we are not speaking in this sense at present, but we are speaking of substantial individuation itself. And thus we say that in the second sense matter alone does not suffice to individuate without quantity being understood, because matter both has a relation or respect to form, and to other matter similar to itself. According to the relation to form, it implies potentiality and confusion to many, and thus does not found individuation, but rather is the principle of genus, insofar as it is the principle of potentiality to many forms, by which it can be actuated and determined, and thus species is constituted from matter and form, and thus matter can be conceived in common, indeed to be the principle of a more common grade, namely of genus. But with respect to other matter similar to itself, it is rendered incommunicable, although it can be mixed and confused with another through mixture, but then there will be corruption of forms and accidents, nor will the division of matters stand: but the division standing, it pertains to matter, and not to form to make this incommunicability, because the aspect of ultimate subject pertains to it, whence it does not allow the form to be further communicated, nor is it itself communicable to other matter substantially, by this very fact that it is divided: but that it may be divided, quantity is required not as precisely informing, but as separating and dividing, which division being made, from matter arises substantial incommunicability and multiplication.

This being posited we say that the designation of matter is not done through the inherence itself of quantity, or quantity as informing, nor through some absolute mode superadded to matter. Not through quantity as informing, both because quantity, like other accidents, inheres in the whole composite, therefore the designation of matter is not done through the information itself of quantity, since information is not in matter itself, but in the composite, therefore the designation of matter is to be taken through something other than through information; and because even if God were to separate quantity from substance, the individual would still remain, and yet the information of quantity would not remain, but the order to it, therefore quantity does not individuate through actual information, just as the separated soul is individuated through order to the body, as St. Thomas teaches in De Ente et Essentia chapter 6, and separated accident remains individuated through order to the subject; and also because quantity itself insofar as informing needs to be individuated like other accidents, therefore as such it is not formally individuating, but individuated, for no form insofar as it is form is individual through itself, as St. Thomas teaches in opusculum 70, question 4, article 2; and finally because quantity and the other accidents by reason of information only give accidental being, but individuals not only as to the unity which they have in themselves, but also as to distinction from another are substantial, for they differ by individual differences, which are within the genus and line of substance, because individuals of substance pertain to the predicament of substance, therefore this effect cannot be provided by any accidental form, because not only by reason of what is constitutive, but also by reason of what is distinctive two individuals of substance are substantially distinguished, and thus St. Thomas says in the cited opusculum 70 reply to objection 4: "That those things which differ in number in the genus of substance not only differ in accidents, but also in matter and form." And in the same place in reply to the second objection, he says: "That dimensions, since they are accidents, cannot of themselves be the principle of individual unity of substance, but matter insofar as it is subject to such dimensions, is understood to be the principle of such unity and multitude." And he teaches the same in opusculum 29 and opusculum 15, chapter 7, where he says: "That corporeal matter does not have from dimensions to receive form particularly." And finally in Metaphysics 7 lesson 15, he teaches: "That however much forms may be aggregated, there will not be a certain assignation of this singular, except accidentally, insofar as it happens that all things collected together are found in one alone." And thus he infers that the collection of accidents is not the principle of individuation, as some say, but designated matter.

But that matter is not the principle of individuation, as modified by some absolute mode in order to quantity is proved, because that mode is posited superfluously, for that matter may be the root of individuation, it needs only that it be the ultimate subject, but it does not have this through a superadded mode, but through itself. But that it is determined to this quantity it does not have through that superadded mode, for it does not receive quantity through a mediating mode, just as neither other accidents, but the subject receiving them has through itself immediately the receptive potentiality of them, and the same difficulty runs concerning those very modes which are received in such a subject, whether they are singular through themselves, or from matter, for if they are singularized from matter, it is supposed that it without a mode is the principle of individuation at least with respect to that mode, and by the same reason it will be with respect to others. But if it is singular through itself, therefore already something is individuated through itself without matter, why therefore will not other modes, and forms, and accidents have this?

Wherefore the designation of matter is to be explained through order to quantity as dividing and separating the parts of matter themselves. But just as matter although it is not informed by accidents except through the mediation of the composite, nevertheless says an order to them as to dispositions, by which the potentiality itself of matter is determined with respect to this form rather than another, so it says an order to quantity as to one of the dispositions; but nevertheless quantity among other dispositions not only has the office of informing the subject in which it is, giving it the formal effect of quantitative extension, but also regards it as dividing one portion of matter from another, which division being posited as a condition, there results not from quantity itself formally, but from matter itself incommunicability, and substantial distinction with respect to matter thus divided, and this is substantial individuation. And thus I understand matter to be radically designated by quantity, not because matter alone is the root of quantity, since the root of it is body, which does not say matter alone, but matter informed by the form of corporeity, but it is said to be radically designated, because not through the actual information itself which is done in the composite, which is body itself, but through order to quantity as determining and dividing matter, that is, by division itself subjecting to form so much or so much of matter, there arises from matter itself determinate substantial incommunicability, and substantially individuating, that division of quantity being posited, however, as a required condition. And thus St. Thomas is understood who never posits quantity as the principle of individuation absolutely, but with restriction, namely as a secondary principle, or as a certain principle, or as a condition, as can be seen in book 4, distinction 12, question 1, article 1 reply to objection 3, and in part 3 question 77 article 2 and in Contra Gentiles book 4 chapter 65. And yet among accidents he specially attributes to quantity the aspect of individuating anything in Quodlibet 7 article 10, because the other accidents do not make division, and finally he explains that matter alone is the principle of individuation, but quantity only concomitantly, not indeed as formally causing individuation itself in the subject, although it demonstrates it to the senses, as designated in opusculum 29 and opusculum 32 chapter 3 and opusculum 70 question 4 article 2 reply to objection 2 concerning the same opinion can be seen Cajetan in part 1 question 29 article 1; Master Bannez in De Generatione book 1 chapter 5 question 3 article 8; Gonzalez in part 1 disputation 23; the Carmelite Theologians in tract 1, disputation 1, doubt 5. And the reason is taken from what has been said, because thus we save the substantial principle of individuation on the part of the formal distinctive aspect, and making incommunicability; we also save quantity, and the individual properties, whose collection is required for individuation, as is clear from the definition of individual, and not as formally constituting, because the constituted individual is substantial, but they themselves are accidents, therefore as required conditions, which will be further elucidated from the solution of the arguments.

The arguments are solved.

First, it is argued against what has been said: Because this order which we posit suffers the same difficulties as the absolute mode, or other actuating accidents, which we reject, since that order also informs matter and needs individuation. Likewise because quantity does not divide matter except by affecting it and the composite, therefore it individuates by informing, and consequently already supposes an individuated subject. Likewise because if it is only as a condition, God will be able to supply it, as is clear in the application of agent to patient. Likewise in the Divine nature, and the humanity of Christ without incommunicability there is given individuation, for both are communicable to a supposit, and without division in an Angel there is given individuation, therefore quantity is not required as a condition. Finally, either matter is designated by quantity as terminated, or as unterminated, it cannot be terminated, since with the same individual standing, the termination of quantity can be varied, for now it is greater, now less; it cannot be unterminated, since in itself it is not individual, nor determined, but can be varied.

To the first proof it is responded that that order is to quantity as dividing, which division being supposed, the substantial incommunicability of matter itself is exercised, and arises from it with respect to matter divided by quantity; and thus the order does not individuate formally substantially, but is required as a condition for this, that matter may be able to exercise substantial incommunicability with respect to the divided extreme. To the second proof it is responded that quantity does not divide except by actuating, I distinguish; by actuating formally I deny; concomitantly I concede; for division as division is not information but duplication, and discontinuity of actuation; for actuation is preserved in one, just as my quantity actuates my whole, but division formally says the discontinuity of this actuation, which indeed supposes actuation, but does not say it formally, indeed quantity as actuating needs to be individuated in itself, like other accidents but as dividing it determines that so much or so much of substance is subjected to form, and thus is a condition for determining, and determinately individuating substance.

To the third proof it is said that dividing quantity is not required for individuation on the part of unity, but on the part of multiplication of individuals, and that substantial incommunicability can be exercised with respect to this and that. Hence it is an intrinsically required condition for multiplication, for we know no other mode of multiplying matter except through division, nor that this is done except through quantity, whose role is to distinguish parts, and thus it is not a condition which can be supplied, just as neither can existence be supplied for effecting, apprehension for finalizing, thus division for multiplying materially in substance, whether parts or whole.

To the fourth it is responded that the communicability of nature to personalities does not obstruct singularity, but helps it, because singularity and individuation only say incommunicability to inferiors or to others divided from itself, not however to its term through which nature is rendered subsistent, and further incommunicable to term, or supposit. But to be communicable to its own term through which individuation is rendered subsistent in itself, does not obstruct singularity, but renders it ultimately complete, and terminated, indeed even to be communicated to accidents does not obstruct the incommunicability of individuation.

To the last it is said that St. Thomas in opusculum 70, question 4, article 11, affirms that the quantity which designates matter is unterminated quantity: "Dimensions," he says, "can be considered in two ways, in one way according to their termination, and thus they cannot be the principle of individuation, because since such termination of dimensions is frequently varied concerning the individual, it would follow that the individual would not always remain the same in number in another way they can be considered, without this termination in the aspect of dimension only, although they can never be without some determination, just as neither can the nature of heat without determination of white or black, and thus they are placed in the genus of quantity, as imperfect: and from these unterminated dimensions this designated matter is made, and thus it individuates form, and thus from matter diversity according to number in the same species is caused. Hence it is clear that matter considered according to itself is not the principle of diversity according to species, nor according to number, but just as it is the principle of diversity according to genus insofar as it is subject to common form so it is the principle of diversity according to number, insofar as it is subject to unterminated dimensions." But he adds in the solution to the third objection, "that since no accident has the proper aspect of division except quantity, dimensions from themselves have a certain aspect of individuation according to determined situation insofar as situation is a difference of quantity, therefore it has a twofold aspect of individuation, one from the subject like any other accident, another from itself, insofar as it has situation, by reason of which even abstracting from sensible matter we imagine this line and this circle." Wherefore according to St. Thomas unterminated quantity is nothing other than quantity as precisely making division, and difference of situation and under this aspect which is common to all quantity it is said to designate matter insofar as by dividing it it posits the required condition, that matter may exercise its incommunicability, as has been said. And from matter thus individuated forms both substantial and accidental received in it are individuated, even figure itself, and the formation of quantity, by which it is rendered terminated, and therefore as we said above through respect to quantity, as dividing (and this is unterminated) not however as informing, and actuating, the designation of matter is taken insofar as dividing.

Secondly you will object: For matter cannot regard quantity, except insofar as it contains it, and is informable by it, but it does not contain nor regard quantity, except through the mediation of substantial form, to which its respect is terminated prior to accidental, such as quantity is, therefore it is rather designated through substantial form, than through quantity, for it does not contain quantity as this prior to substantial form as this.

It is confirmed, because quantity does not have for root, and principle matter, but body, therefore it is not regarded by matter except through the mediation of body, and consequently through the mediation of the form of corporeity. It is confirmed secondly, for matter of itself is indifferent, that it contain this quantity or that, just as also form from which it emanates, therefore it does not contain this quantity, unless matter is first this, therefore it is this before quantity, or not through quantity, since, because it is this, it contains this quantity: indeed a circle is made in this mode of individuating, since matter is this, because it is designated by this quantity, and quantity is this, because it is contained in this matter.

It is responded by distinguishing the major of the principal argument, it does not regard quantity, except insofar as it contains it and is formed by it, I distinguish; formation, and containment of inherence only, I deny; formation of disposition under priority of material cause to form, and to its own formation also, and inherence, I concede. To the minor I distinguish; it does not contain, nor regard quantity, except only through the mediation of substantial form, insofar as quantity is as informing, and actuating let it pass, under causality, and priority of disposition, and division I deny; for as disposition matter regards quantity prior to substantial form, although in the genus of formal cause it is the reverse, because through disposition under the precise formality of disposition matter is determined to substantial form. But the first disposition of matter is from quantity as dividing, and segregating this matter from that, and under this office, and respect of dividing precisely quantity is called unterminated, because although in reality it is never except under some termination, and figure, nevertheless according to itself, one is the formality, and respect of quantity, as dividing, and distinguishing, another as terminating, and informing; and the first by which matter is disposed to form, is to be divided, and segregated from another part, or matter, which cannot be informed by that form for that state, and under this separation quantity is preunderstood in matter before substantial form by priority of disposition, although the same under the aspect of accidental information presupposes form and only through its mediation, belongs to the subject. Nor is it absurd, that the same form under diverse respects, and considerations precedes, and follows substantial form, for causes are mutually causes, and according to one respect is effect, according to another cause, as has been treated at length above in question 1, article 7.

To the first confirmation it is responded, that quantity as proper passion follows form, as disposition precedes it, as has been said about other dispositions in the cited place, and not only adapts matter to form by extending its parts, and informing it, but also by dividing, and separating from another, that through this division so much or so much matter may be subjected to form. But that in diverse genus of cause it precedes, and follows matter, is not inconvenient, as has been said about other dispositions in the aforementioned place.

To the second confirmation it is responded, that matter is indifferent to this quantity, or to that as to form, by which matter ought to be actuated, and therefore does not receive this singular quantity, before matter itself is singular, and determined, but nevertheless quantity itself as dividing precedes the singularity itself of its subject as a required condition, that matter may exercise its distinction, and substantial incommunicability towards other matter, and thus through such division matter is designated, insofar as it is separated, and divided from another, that it may be able to exercise its incommunicability substantially towards it. Hence we do not commit a circle, both because it is proceeded in diverse genus of cause from matter, as from root of first incommunicability to quantity, as to dividing, and designating condition, but in diverse genus of cause, a circle is not vicious; and also because quantity is not the reason of multiplying individuation as determined, or terminated, but precisely as dividing, for under this precision it sufficiently posits the required condition, that matter may exercise its incommunicability with respect to another, and be the reason of individuating forms coming to it, and thus from quantity as dividing, and not yet as individuated, to matter, as receiving, and individuating the same quantity, a circle is not made, nor is it new, that some subject regard form according to reason, or common grade, and that common reason be condition or medium, that other reasons in particular are regarded, just as from soul according to the reason of animal body has sensitive powers, without which it is not disposed to rational life, although in reality senses are not given in man without rationality, and again who has rational soul as form, has senses from it as from formal cause.

Lastly it is argued: Because numerical distinction is substantial, and actual, therefore it is not from quantity, because it is an accident, nor from matter, because it is not act; but act is what distinguishes. But if it is individuated from quantity as from a condition, why not also from form as from a condition? Especially since quantity itself is variable, and now greater, now less, and similarly quantity itself needs individuation, like other accidents, therefore it is not the principle of individuating. Finally, because division, and reception of quantity is in body, and not in matter alone, therefore it should rather be said, that body is the principle of individuation, than matter.

It is responded from what has been said, that numerical distinction is substantial, because it has for reason, and radical principle substance, but quantity as condition insofar as it is dividing, but to divide does not belong to substantial form by reason of itself, nor to another accidental form, and thus quantity, and not another form is condition. But act is what distinguishes by formal distinction, nevertheless it can have the mode of individual distinction from matter, insofar as it is the first reason of incommunicability, but individual distinction says plurality of unities with such mode, namely of incommunicability. But that quantity itself is varied, and individuated, this belongs to it insofar as it is terminated quantity, and informing subject like other accidents, for thus quantity accidentally, and materially in the same individual can be varied according to various terminations, but formally, and as to the reason of dividing, and separating from another individual always remains the same. And so quantity is not varied more than individual is varied, which indeed under the same absolute unity, it stands well that it receives diverse parts, and changes diverse quantity terminating, or figuring in diverse mode, but dividing in the same mode, in that mode by which it is verified, that the same body in number, and the same matter always remains. Finally, although body is what is divided, and informed through quantity, nevertheless matter is the principle of incommunicability, and therefore is the principle of individuation.

ARTICLE V.

Whether accidents are individuated by their subject, and whether two numerically distinct accidents can exist in the same subject?

In St. Thomas's opinion, it is most certain that the individuation of accidents is taken from the subject in which they are, or in relation to it, which St. Thomas affirms in countless places and can be seen especially in Part 1, question 29, article 1, and question 39, article 3, and opusculum 29, and 36 and II-II, question 24, article 5, question 1 on Truth, article 11 and Part III, question 35, article 5, and question 77, article 2, and often elsewhere. The foundation is what St. Thomas commonly repeats, especially in Metaphysics 7, lesson 15, and opusculum 70, question 4, article 2, because no receivable form is of itself individual and singular, except through its relation to the receiving subject, for of itself a form is rather communicable, unless it is detained and limited by a subject. Wherefore all incommunicability is born as from a principle from the receiving subject, unless the form is separate and of itself incommunicable to a subject; for then from the very mode of such a form it is rendered singular and incommunicable. But if it is rendered incommunicable from the subject, it also has individuation from it. The reason why forms of themselves are communicable to many, as far as is from the force of the concept and office of form, we have already said above, and St. Thomas touched on it in Contra Gentiles 4, chapter 6, and Cajetan in chapter 6 of De Ente et Essentia in the question on the principle of individuation to the 6th, because forms can only ground either formal distinction opposed to formal unity, or distinction of forms, although not in a formal way. The first pertains only to specific plurality, just as on the contrary formal unity to specific unity, which of itself is common to many. But the second must necessarily come to a form from another principle than from the force of form, or through order to another, since in itself it is nothing but an informing form, because it is receivable in another, it says an order and relation to that in which once received the form cannot pass to another nor become common to many, therefore from there as from a principle, or through order to it it has incommunicability, and consequently individuation, because the principle of individuation as has often been said, is incommunicability, and division according to the mode of incommunicability.

You will say: Of itself a form has communicability to a subject, and in this genus it is rendered further incommunicable to another by matter, as to a subject which it informs. However, of itself an accidental form is not communicable to other lower forms since it is itself the lowest, and in this consists the nature of individuation, not in the first. But against this, because if an accidental form is one in number of itself, and incommunicable to many inferiors, it will also be incommunicable to many as subjects, and thus it will have both incommunicabilities from itself, not one from the subject, another from itself. The antecedent is clear, because an accident by this very fact that it is one in number, of itself cannot pass from subject to subject, and much less while remaining in one, be placed in another, therefore by this very fact, that it is one in number, and incommunicable to inferiors as numerically diverse forms, it will also be incommunicable to many subjects, and thus from every part it will be individuated through itself, and the arguments made above against the individuation of a thing through itself return. For if this is not granted to substance, much less to accident. Then, because if an accidental form of itself is communicable to many subjects, but is rendered incommunicable through this determined subject, therefore of itself it is common, and universal in the manner of the fifth predicable, which is the predication of accident of subject, although it is not common, nor predicable in the manner of the second predicable, which is of species of individual, namely of form of this and that form: but the universality of the fifth predicable does not belong to an accident which is one in number, therefore that it may be one in number, it depends also on incommunicability in the manner of the fifth predicable, which is with respect to the subject. The minor is clear, because one accident in number, for example, this whiteness, cannot be verified denominatively of many subjects, but only of one, for just as whiteness makes white, so this whiteness makes this white, and no more, therefore it can only be predicated of one, therefore what is one in number in the manner of the second predicable is not common in the mode of the fifth predicable.

But you will inquire, whether prime matter itself is the principle of individuation only radically and remotely, as by which of individuation of accidents, or truly only the composite itself, to which they inhere. It is responded only from the composite which is a complete being in act, not from matter are they individuated as St. Thomas teaches in opusculum 29, near the end. For although an accident is individuated by the composite which is the subject, and the subject itself by prime matter as by a root, nevertheless this is in the line of substantial individuation, which indeed must be presupposed to be for the accidental, but nevertheless formally speaking the root of that individuation of accidents stops in the composite itself, because it stops in complete being, and in act, for this is the sustaining subject of accidents, as accidents are, and although prime matter is the principle by which, of sustaining accidents on the part of reception, nevertheless it is not determinately and formally the root individuating accidents except insofar as it becomes in act through form in the composite, for of itself it is a common principle to substantial and accidental forms, immediately indeed of substantial, mediately of accidental, and so speaking per se, and in the line of accidental individuation determinately this root stops in the subject itself, which is the composite, just as the resolution of faith, as it is of faith, stops in God as speaking and testifying, although presuppositively it is required that He be intelligent, and be immaterial, and pure act; but this resolution is not of faith as faith, but of discursive cognition, by which Divine truth is known by reducing to its reasons and principles.

You will say: At least quantity is individuated by itself, because it is first in its genus, namely as a condition required for individuating. Whence St. Thomas in Part III, question 77, article 1, and quodlibet 7, article 10, and in other places admits, that quantity is individuated by itself. It is responded, that we have said enough about this in the preceding article, that quantity is considered in two ways; in one way as to the effect of dividing parts of matter, and as to this effect it is individuated by itself, that is, the proper parts of quantity are not divided by another quantity, but through itself, but other forms, and substance through quantity. And so in this it has something special among other accidents. In another way it is considered as to the formal effect which it gives by informing, like other accidents, for it extends parts of substance, and terminates, and thus is considered as terminated quantity, and under this consideration quantity is individuated by the subject like other accidents, and not by itself only, for it participates being from the subject like other accidents. Whence St. Thomas says in opusculum 70, question 4, article 2: "That quantity has a twofold mode of individuation, one from the subject, like any other accident, another from itself insofar as it has situation by reason of which in abstracting from sensible matter, we imagine this line, and this circle." Wherefore in the part that individuation imports division from another numerically it depends on quantity, as on a required condition, and making division, and in this other forms even substantial depend on quantity, but it itself does not depend on another as on such a condition. But in the part that individuation says undivided unity in itself, quantity depends on the subject, from which accident has being, and consequently is also sustained in unity. Nor does St. Thomas in other adduced places speak, except of quantity as it makes division, in which quantity gives the condition required for individuating as first in that genus.

The difficulty therefore remains in this article, which is also the principal one concerning what St. Thomas often affirms, that two accidents distinct only in number cannot be in the same subject, or in the same part, because they are individuated by it, as he expressly affirms in Part III, question 35, article 5, and in book 3, distinction 23, question 3, article 4, question 3, and in book 4, distinction 12, question 1, article 1, question 3, and in many other places. And indeed many agree in this at least speaking of absolute accidents, but not from the same foundation, for some prove it by reason of superfluity, others because of identification, because an accident of the same species being posited with another in the same part of the subject is reduced to one with it, just as if two liquors are mixed.

However, the foundation of St. Thomas is taken from the principle of individuation often already mentioned, because form from the force of form does not have the principle of numerical division, but of formal, therefore it must be taken from some principle outside form, which is related as a material principle receiving, and rendering incommunicable such form, and thus accident since in itself it only has the nature of form, but does not intrinsically include matter, but only says order to it, from this order it will be multiplied by multiplication not formal, which is numerical. But if on the part of this material principle division does not begin, there does not remain in the form itself any reason for individual multiplication. And thus Cajetan rightly said in Part III, question 35, article 5, that this doctrine of St. Thomas is founded in that maxim: That all division is made, either through formal principles, or through quantity, or material division, and thus material and quantitative division being removed on the part of the subject, and the formal unity of the form itself standing there is not given a principle of numerical multiplication. The understanding of which consists in this, that numerical division must always be caused, and arise from some divided material principle. But if this material principle is not multiplied, the form will always remain one from the unity of the extrinsic individuating principle, but this individuating principle of accidents is the subject in which it is received, because from it incommunicability comes, as has been sufficiently proved above, therefore if this material principle is not divided, so that from it material distinction begins, there cannot be given individual multiplication of accidental form. But if accidental form is once individuated through order to this subject, in which it is produced, whether it be the proper subject, or extraneous, even if afterwards it is separated, or placed in another subject, it does not lose individuation, because it retains order, and respect to that first subject whence it was individuated. Nor is it inconvenient, that two whitenesses individuated by diverse subjects, are divinely separated from them, or even united in one third subject with each's individuation conserved; for then there will be many individual accidents in one subject per accidens, not however per se will they be individuated by it, but by diverse subjects in which they were produced, and through order to which they presuppose their first made individuation.

Nor does it obstruct, that those unions in that third subject in which they are received, are also of the same species, nor are they individuated by another, than by that very subject, therefore at least those two unions will be received simultaneously in the same subject as two individuals of the same species. For it is responded, that that union if it is taken for the inherence of accident, is a mode identified with the accident itself, and is multiplied in number to the multiplication of the real entity itself of accidents. Whence in that case in which the accidents themselves are supposed to be individuated not by that subject in which they are, but by others of which they are proper, already the accidents themselves can individuate in themselves modes, not by reason of the subject to which they are newly conjoined, but by reason of their entity individuated from other principles, and subjects to which they say order; just as also when they are separated from subjects, they receive some modes in themselves, and individuate. But if we speak of union, not for inherence, but for the change, by which the subject is changed for receiving those accidents, those changes follow the action of God transferring accidents to that subject, which since it is a different change from natural alteration producing accident in subject, will also say union of different species on the part of change. Wherefore if two numerically diverse accidents are united to one subject by supernatural action, this will have to be done by change of diverse species, that there may not be two unions of the same species individuated by the same subject. By which reason also, if many Divine Persons assume one humanity by diverse unions, the unions will have to be of diverse species, because they are terminated to diverse Persons.

The arguments are solved.

First, you will object: If a subject cannot receive many accidents of the same species unless it is divided, therefore neither can it receive many individuals of different species, for they are truly many individuals, therefore also to give those diverse individuations, diversity of subject is required, which is openly false. Similarly also the same subject will not be able to receive two numerically distinct accidents successively, unless it is also successively plurified, but the subject is not successively plurified. That time is discontinued does not matter, because time is only a circumstance, not a radical principle of individuation, and thus division of the radical principle which is the subject will not be required. And finally we see many lights in the same subject if many luminous things are applied, a sign of which is that many shadows are made, which are distinct only in number, like the lights.

It is responded that in the reception of many accidents in species, numerical multiplication is not made, but specific, placed however in its individuals. And therefore it does not need to divide the material principle, since division is made on the part of form, and formal distinction, but it suffices to place in the subject the capacity of many forms diverse in species, which as St. Thomas teaches in On Truth 8, article 14, are received according to diverse potencies of the subject, that is, according to diverse respects of participating forms, just as sweetness is received from participation of humidity, whiteness from participation of light. But this capacity is not found in prime matter for having many substantial forms simultaneously, because any substantial form has the privation of another, because each gives first being, and being simply. However when diverse forms of species are not given, if multiplication must be made, since it does not arise on the part of form, as form, or of formal distinction, it must arise from division of the material principle, to which since form says a relation, multiplied individuation results in form.

To the second part of the argument it is responded, that in the case of succession of forms of the same species, it is not necessary for the subject to be divided entitatively in act, because multiplication of forms is not given in act, but only one is in act, but another has passed, and is not in act; hence just as multiplication is in potency, but unity in act, so one material subject in act suffices, although in potency, and virtually it is related to many. And thus time is not the radical principle of multiplying, but only a circumstance, it is however the principle of consuming one which has passed, and leaving in act only one which exists and is individuated in act.

To the third part of the argument it is responded, that double luminous, since it is not penetrated, but each is in a diverse part of the medium, also effects diverse light, or intends according to diverse lines. But that two shadows are made, they are also made in diverse parts of space, just as the lights themselves are diverse, by which the opaque body is touched through diverse lines.

Secondly it is argued in those which are related relatively: For since relatives regard a term outside themselves, from multiplication of that, and not only from the subject they will have to be multiplied, for why will they not be multiplied from terms just as from subjects? And thus one father to many sons will have diverse relations, since with one son perishing the respect to others remains and the same is true of white receiving many whites as similar. Then two intentional species, or two visions, or concepts representing two individuals of the same species do not differ, except numerically like the objects themselves, and yet they are simultaneously in the same potency, similarly charity had in Christ two acts towards God one necessary, by which he enjoyed, another free, by which he merited by loving God, and yet they were of the same species, like charity itself from which they proceeded. Finally, efficient and final cause can effect and finalize two actions in number, therefore also material cause can receive many forms in number.

It is responded that some think that many relative accidents, or behaving respectively to diverse terms, or having diverse states, or modes can be multiplied in number in the same subject. But it is expressly against St. Thomas in Part III, question 35, article 5, where he speaks of relation to many sons, which he says is not multiplied in one father, because the foundation is one, namely generative power as reduced to act, and what is done through many actions, or to many terms is related materially, for also by one action it happens that many sons are generated, and born from one birth, and then relation is one, because it is founded in one action, but the terms are only materially many; but in the same way relation is related to many sons born through many actions, or through one; about which we treated more extensively in Logic q. 17, art. 6. And so the relation of father can attain adequately all proceeding from this, because under this aspect this relation is founded. But with one son dead the same relation remains to another as if intensively, but not as if extensively, and adequately. And the same is true of the agreement of white to many or fewer whites.

And to the instance, why multiplication will not be taken from diversity of terms to which, just as from diversity of subject, it is responded the cause is, because the term to which is not regarded per se, as material principle, and of material division, but as formal, and specificative, because species is taken from object, and from term to which. But that this formal aspect is found in many, or fewer, pertains to its material, and makes for extension of such act, not to the principle of multiplying it, because it is not the principle of incommunicability, and incommunicable multiplication, but is the subject having in itself the formal aspect, which such act regards, and so by receiving the formal aspect that is regarded in which it is found as material touched, not as rendering incommunicable. A sign of which is, because the same action can touch diverse material terms, as if inadequately contained under the same formal aspect. But truly the subject, or material cause, so receives forms, that it gives incommunicability from reception itself, and thus individuation and if it is multiplied, individuation will be multiplied. But concerning efficient and finalizing cause, we say that they are not related, as intrinsic principles of individuation founding incommunicability, but as extrinsic, either by executing, or alluring, or directing. Whence that they touch many actions distinct in number, or do not touch, is not taken precisely from efficient, or end, but from disposition of matter on which in this part efficient depends, and to which it accommodates itself, that it may be able to have many actions in number, but matter has this principle of itself.

To the other part of the argument concerning species, concepts, and acts it is responded, that with respect to objects they can be related in two ways. First, that such species, or cognition is adequately related to this individual; second, that inadequately, because it touches many as contained under one aspect, or medium. If in this second way, species or acts are not multiplied, but the same species serves many acts, by the same vision in number I see many things contained in this medium, because that plurality is material on the part of the touched object, which is not a principle of multiplying visions individually. If in the first way, they are acts or representations of distinct species, because that which is of individuation in the object is regarded per se, and as adequating such act, and consequently as specificative of it, and therefore such individuating differences, because they are taken as reasons of adequating, and per se distinguishing acts, are taken as specifying, and although in themselves entitatively they differ only individually, nevertheless objectively they are diverse specificatives.

But as to what pertains to acts of charity, some hold that Christ the Lord did not have, except one act in number of charity regulated by beatific vision, which as it was borne to God was necessary, and not meritorious, but as it was borne to creatures, was borne freely, and thus could be meritorious, about which can be seen Alvarez Part III disp. 45 and to this some Thomists incline. Others not improbably think that charity has many acts distinct in incomplete and imperfect species, just as diverse acts of religion are distinguished, as devotion, prayer, vow, adoration, etc. And fortitude has two acts, to attack, and to sustain, and other virtues similarly, which acts they can exercise simultaneously, and thus they are not distinguished in number alone, although they proceed from a habit of the same species, but they have diverse incomplete species, just as two heterogeneous parts in man thus charity has two distinct acts, as St. Thomas admits in II-II, q. 44, art. 2 ad 1, one towards God, another towards neighbor, which can be simultaneous, therefore they are distinguished more than in number. What wonder therefore, that also towards God the same charity can have two acts distinct in species as if incomplete, and partial, one necessary of fruition regulated by beatific vision, another free regulated by infused knowledge not seeing God clearly, and consequently such acts are simultaneous, like acts towards God, and towards neighbor? But concerning these things Theologians say more.

CONCERNING BOOK TWO.

QUESTION X.

ON THE ELEMENTS AND PRIMARY QUALITIES.

ARTICLE I.

What is an element, how many are there, and what are the primary qualities?

Element can be taken in two ways. In one way broadly and commonly as it includes the first principles and intrinsic causes of things, in which sense we said in Physics 1, q. 11, art. 1 from St. Thomas that these three, namely principle, cause, element, are related as more and less common, but element is preserved through this that it is some principle and cause intrinsically composing. But cause is related more commonly and includes also extrinsic principles, from which something proceeds with dependence and participation. But principle is said even more commonly to be that from which something proceeds, even if without dependence and participation, as in divine things. In another way element is taken more strictly for principles which are also composite in themselves and principled, as bodies composed of matter and form, because however they are simple bodies they are called elements, insofar as they are distinguished from mixtures which are composed from them. And thus they are taken for the four common elements, earth and water, air and fire; concerning which it is treated both in On the Heavens 3, and here; but there it is treated concerning them according as they seek a determined situation in the universe; but in the present as they are the first generable and corruptible things, and thus pertain to generation and corruption. But element is defined as that which is a body, into which other bodies are divided, in which it is in act or potency, but it itself is indivisible into diverse things according to species. "Body" is placed in the place of genus, and excludes those elements which are the first principles of bodies, as matter and form, but are not body, for neither is matter body, but the principle of body. The remaining particles are placed to distinguish these elements from the remaining mixtures, which are not simple bodies, and it is said not to be divided into other bodies, that is, resolved through alteration and corruption, for mixtures are resolved into elements, but elements are not resolved into others, but one is corrupted by another, or conspires into one third, which is a mixture: but element is said to be in act or potency in a mixture, insofar as elements virtually remain in a mixture through their qualities, as was said above in question five. And although integral parts are also in body, in act or potency, and the whole is divided into them, nevertheless it is not divided through alterative resolution, but through quantitative division, but the parts themselves are also resolved into elements.

But how many elements there are is also clear from the treatise in On the Heavens 3, for omitting the opinions of the ancients, it is clear that four elements are to be posited which are enumerated above. Aristotle proves this both in On the Heavens 3, from local motions, and situation in the universe, and from gravity and levity, all which proofs return to the same thing, because there are only four places below heaven, namely the highest, which touches heaven, the lowest, which is the center of earth, one near the highest, and another near the lowest, and thus supreme levity corresponds also to the supreme place, supreme gravity to the lowest, but to the middle places middle gravity and levity, and thus there are four elements, which seek these four places, and levities, and gravities. But in the present he proves the number of elements from the number of contrary qualities, namely heat and cold, dryness and moisture. For since these are properly and per se the primary qualities, they belong to the first bodies, which we call elements, but from these some must belong in the highest degree to simple bodies themselves, for if none belonged in the highest degree, but all temperately and moderately, they would belong in that way in which they belong to mixtures, in which all qualities are moderate. But some quality belonging in the highest degree, only four combinations can be made in the agreement of these qualities, therefore only four elements can be given. The minor is proved, because only these combinations can be made, namely hot and dry, hot and moist, cold and moist, cold and dry. But the other two, which can be made between contrary qualities, as cold and hot, dry and moist, do not pertain to the matter, for if both are in an intense degree they cannot be simultaneously in the same subject. But if one is intense, either it is intense in the highest degree, and thus totally excludes the opposite, nor does it make a combination with it, or it is intense short of the highest, so that it admits something of the opposite in a remiss degree, and this pertains more to mixtures than to elements, because mixtures are those which can have all four qualities tempered among themselves; but then that body which would have hot and cold, would not repugn having all four qualities, for it could also have the other two, namely moist and dry tempered in the same way, just as hot and cold, supposing that it had none in the highest degree; therefore that something may be an element not having all four qualities, it is necessary that it have some in the highest degree, that by reason of it it totally exclude some.

However, because this reason supposes that four primary qualities are given, it is necessary to explain what they are, and how they are primary. Because therefore primary is said in some genus through negation of something prior, those are called primary qualities which do not have others prior at least in that genus. Whence primary qualities can be defined in the manner of first principles: Which are made neither from other qualities, nor from themselves mutually, but others from them.

But concerning these primary qualities we can speak either absolutely in every genus of quality, or more strictly in the corporeal genus, or still more strictly in the corruptible genus. In the first way it is certain that spiritual qualities, both in dignity and in causality are prior, because through them the first corporeal things are moved, on which the first corporeal qualities depend. In the second way there is also given some quality prior to these primary qualities, just as are celestial qualities, among which the principal is light, both because it was first made by God, when it was said in Genesis 1: "Let there be light"; and because it is more immaterial than the rest, and less dependent on motion; for illumination will remain even with the motion of heaven ceasing; and because it belongs to the most perfect body, namely the sun, and the empyrean heaven. Similarly figure and form are qualities common to corruptible and incorruptible body, nor do they always follow the alteration of primary qualities, but only the division of the continuous, or the creation of incorruptible body itself. But truly in the third way are given primary generable and corruptible qualities, which are the first contraries in physical qualities, and are those four, namely heat and cold, dryness and moisture. And they are called primary qualities, because in the alterative and corruptible genus, they first serve for all substantial generation, both of mixtures and of elements, and therefore on account of their universality in serving for generation, they are primary, and then, because they serve for the first sensibility, and the first sense of all, which is touch, for they are per se first tangible, but touch is the first sense and foundation of the rest. And finally, because all other corruptive and alterative qualities in these inferior things, result from these as from prior and simpler ones, like odor, flavor, color, gravity, levity, soft, hard and other similar things, which are mixed qualities, because they properly belong to mixed bodies, and thus result from other prior ones, which belong to simple bodies, and are not other than those four mentioned, which are found to be in the elements.

But if you say: For besides these qualities other virtual ones are to be given in the elements, which are called such, because through them the substance of the element produces these four primary qualities themselves, for when water, for example, is vehemently heated, it retains nothing of formal coldness, since no cold is sensed in it, and yet it retains something of virtual, because it can expel that heat through itself, and be reduced to coldness, but that coldness cannot immediately emanate from the substance of water, because substance is not per se active, therefore from some quality which is called virtual coldness, and the same is true in other elements it is responded, some think thus, that these virtual qualities are given, which are also found in some mixtures, just as pepper and wine are said to be virtually hot, and others are found to be virtually cold. However in elements we cannot admit them as in mixtures. For these virtual qualities in elements, either are of the same species with formal ones, or not. If they are, therefore they are superfluous, for to what end two qualities of the same species? And the same difficulty runs, namely how these virtual qualities can emanate from the subject, for if they emanate through others there will be an infinite process: if through themselves, why similarly will formal qualities not emanate? If they are not of the same species, how can they be the reason for producing formal qualities, of whose species they are not, since like only acts on like? Likewise because either that virtual quality is per se sensible or not. If not, it is an unknown quality, and does not belong to the first body per se sensible, such as is an element, for all its qualities are sensible; if it is sensible, therefore it will be of the same species with others, which are similarly sensible. And since otherwise substance does not need for the emanation of quality befitting it another mediating quality, that this emanation may be made, these virtual qualities are superfluously posited, that the first formal ones may emanate. But that in some mixtures these virtual qualities are found, is not for that function, namely that other qualities may emanate through them as media, but that they themselves may act on others, for pepper does not heat itself, but the stomach, for since mixtures are made from the mixture of elements, it happens in some that such a temperament is made, that heat or cold predominates, and when that temperament of the mixture is dissolved by the heat of the stomach, that predominating quality comes forth more strongly, namely heat or cold, and operates more sharply.

But you will inquire, why by Aristotle some of these primary qualities are called active, some passive. It is responded that Aristotle both in this book 2, text 8, and in Meteorology 1, says that of these qualities heat and cold are active; dryness and moisture passive. Which is not to be understood thus, as if dryness and moisture absolutely and according to themselves are not active, for they act on each other, and produce similar to themselves; for moisture moistens, dryness dries, and they expel each other as contraries. It is understood therefore, that comparatively to mixture, and in order to constituting it, dry and moist are related more materially, and passively, than hot and cold. Whence those things in which moist predominates, are well passive, because they are more easily terminated by alien terms, which pertains to moist, or retain their own, which pertains to dry, but those which are more vehement in acting, participate more of heat or cold, because it pertains to hot and cold to congregate or segregate, which implies action.

From what has been said we can gather, how the definitions of these primary qualities are to be explained, which Aristotle defines in the present according to their activity or passivity. Hot therefore is defined as that which congregates homogeneous and similar things; cold that which congregates dissimilar things; moist that which is easily terminated by an alien term, with difficulty by its own; dry conversely that which is terminated with difficulty by an alien term, easily by its own. Which definitions are understood in a physical manner, that is, that such qualities seek these effects, as far as is from themselves, although per accidens they can be impeded. For hot is said to congregate homogeneous things, because it seeks that from the force of its activity;

indeed if sometimes it seems to congregate those things which are of diverse genus, or to loosen and resolve those which are of the same, as when it congregates many foods, and from them makes a liquor in the stomach, or when it resolves ice, lead, brass, and similar things; it does this not by congregating those things which are of diverse genus while remaining in diverse genus, but rather by educing one certain third substance from them, for example, a third liquor, which it makes to be one, and consequently congregates a thing of one genus; and similarly by resolving ice, or liquefying lead, it makes to be one those which are of one genus, because through resolution itself, and liquefaction, those which are of one genus are segregated from another, just as what is mixed with lead, and other metals is separated, and in nourishment what is impure from that which is pure, and thus always, those which are of one genus are congregated by heat, and those which are of diverse genus are segregated. But cold if it congregates, does not do this by resolving, but rather by thickening, and therefore does not separate; but aggregates one with another. But per accidens cold is said to dissolve, not by rarefying, but because with heat receding, the parts remain impeded and loosened in their function, as when members are said to be loosened by cold, because with vital spirits receding the members remain impeded. Similarly dry is said to be terminated with difficulty by an alien term per se, and from the force of dryness, not per accidens, just as fire, for example, from the force of dryness is terminated with difficulty by an alien term, indeed of itself it seeks freedom, and if it is too much enclosed it perishes, nevertheless because heat dominates, and makes fire itself rare, for this reason not only dryness operates, but also rarity, which easily yields to an alien term. And similarly very minute powders on account of their tenuity admit much air between minute parts, and thus if they are not compressed they easily yield.

The arguments are solved.

Against the number of elements an argument is made concerning fire: because if it were an element, it ought to have a determined place in the universe, just as the other elements have, but this is false, therefore. The minor is proved, because if it had such a place it ought to be above air, because fire is maximally light, but it is not fitting for it to be above air, both because Aristotle in Meteorology 1, ch. 4, says: "That what is near the moon is not fire, although it is called fire by us"; and because there it neither shines nor heats, but if it were there such a vast body could not fail to be sensed, both in light and in heat; and because it lacks fuel at such a height, therefore it cannot be conserved there. It is confirmed, because elements are found among us, with mixed qualities, as water with flavor, for sweet water is given, or salty, or bitter: earth is also found with peculiar virtues for diverse effects, which require a particular temperament, therefore it is not an element, but a mixture.

It is responded by conceding that the proper place of fire is above air, and near heaven, for this its natural inclination seeks, because it has greater lightness than air, but it would be against nature to give fire such an inclination, and perpetually deprive it of such a place. To the place of Aristotle therefore we say, that he does not deny that near the moon there is fire as to the substance of the element, but as to the conditions which it has among us, and by reason of which it is called fire, for there on account of its tenuity it seems rather to be flame, but among us on account of too much concretion it is called fire. Just as ice is not the element of water, but an excess of cold concreted in water.

To the second proof it is responded, that fire there does not shine on account of too much rarity, for that something may shine, it is required that it be a terminated and dense body, that it may emit rays, just as also the empyrean heaven does not shine, although it is most lucid on account of its rarity, as St. Thomas notes in Part I, q. 66, art. 4. But fire does not heat these lower things, because the heat of fire is diffused directly, and to the sides, because there it diffuses its power, to which it tends, but to lower things it does not tend, and thus does not diffuse heat to these lower things, or so little, that at such a distance it is not sensed. To the third it is said, that fire in its proper sphere does not need fuel, as among us, because here it is open to many contraries, and since it is made a very tenuous substance, it is easily destroyed, unless it is fortified in some denser matter, which does not occur in the proper sphere.

To the confirmation it is responded, some think that pure element is not given, but elements are found only in mixtures, against whom can be seen Master Bannez in On Generation 2, ch. 3, q. 1, concerning the last argument. It must be said therefore, that element can be called pure in two ways. In one way substantially, that is, that it does not have another substantial form, than of element. In another way accidentally, and as to its qualities, concerning which we can speak in two ways, either as they are in proper places, or outside them. Therefore as to substantial form all elements even outside natural places are pure, which is clear, because from this that they are placed outside proper places they are not corrupted, nor do they become mixtures, therefore they remain substantially elements. But as to qualities it is certain, that somewhere pure elements are found, like fire in its sphere, or near the concave of the moon, where no other body can be found, by which it is rendered impure; and earth also in deeper parts, to which the alterations of heaven do not reach, will be pure on account of the exclusion of another body making mixture. And it is probable that also in the depth of the sea pure water is found, but there it will have neither flavor nor color. But that usual water among us has flavor, is extraneous to it, and not from its own; and especially the saltiness of the sea comes from burnt exhalations, and was attributed to it by God for the generation of fish, and the convenience of navigation, as we will say in Meteorology, treatise seven.

Secondly it is argued: Because the number of four elements is deduced neither from the motion of simple bodies, nor from the place owed to them, nor from combinations of primary qualities, therefore from no principle. The antecedent is proved, for if we attend to motion there are three differences, namely from the center, to the center, around the center, therefore there will be three elements. If we attend to place, there are two, namely up and down, also two powers of moving, namely gravity and levity, therefore only two elements. If we attend to combinations of primary qualities, those can be made much more than four, for these primary qualities can be conjoined according to diverse grades in many ways, as hot in the highest degree, and dry below the highest, and similarly hot and dry in the highest degree, and the same can be said concerning hot and moist, and concerning cold and dry. But in remiss grades also many combinations can be made, since also contrary qualities in remiss grades can be simultaneously, and not only non-contrary qualities. Therefore more combinations can be made than four, and consequently more elements.

It is responded that when we collect the number of elements from the motion of simple bodies, it is understood concerning simple corruptible bodies, for the incorruptible which is heaven is moved circularly, or around the center, as its figure shows, and daily experience. Therefore the motion of simple corruptible bodies is only from the center, or to the center, but it belongs to two in the extreme, namely to earth in the center itself, and to fire most distant from the center, that is, near heaven, to the other two in a middle way, namely near the center to water, and near fire to air. We say the same concerning place, that it is twofold, speaking as if in genus, namely up and down, but it is divided into four modes, namely up, and down, in the extreme and up, and down in a middle way. Gravity also and levity is found, either in the highest degree as in earth and fire, or in a middle way as in water and air. But as to what pertains to other combinations we have already said above that those are not possible for elements, but either for mixtures, if contrary qualities are reduced to temperament, or if for elements qualities are possible in a remiss grade, this necessarily must be with exclusion of its contrary, for if both contraries are admitted in a remiss grade, it will have a temperament of all primary qualities, which is proper to a mixture. But whether an element is given to which two qualities belong in the highest degree, or two in an excellent grade, and none in the highest, we will say in article three.

ARTICLE II.

Whether contrary qualities expel each other in intense degrees, and are compatible in remiss degrees?

That contrary qualities mutually expel each other is shown both by daily experience and by the very definition of contraries given by Aristotle in Metaphysics 10, chapter 6: contraries are those which are maximally distant under the same genus, and mutually expel each other from the same subject. The difficulty therefore is whether this repugnance and expulsion happens by reason of the very entity of the qualities, or only by reason of the degree and state which they have, such that they are contrary only in intense degrees, not in remiss degrees. For on this will depend knowing in what the nature of contrariety is founded, and why one contrary expels another, and this doctrine will also serve for moral and intellectual contraries.

I SAY FIRST: Contrariety, which is a special opposition, although it originates from contradictory and privative opposition, nevertheless adds something special above those, namely that in it a middle is found with positive extremes. This is clear from Metaphysics 10, text 15, lesson 6 in St. Thomas and opusculum 37 on opposites. And the reason is, because it is of the nature of any opposite that it is repugnant to its opposite, for if it is not repugnant to it, but only agrees with it, and they can be simultaneously, it is not opposite to it, but apposite and agreeable. Therefore one must include the negation of the other, because it has repugnance and exclusion of the other; but it cannot exclude except by negating it. But all negation and position are principally found in contradictories, then in privatives, for blindness imports the negation of sight, in contraries white the negation of black, and in relatives son is not the father of him whose son he is. But these are all the genera of opposites.

But in what the special repugnance of contraries consists is difficult enough to explain. For it is clear that they have a special repugnance, because it is specially distinguished from other species of opposition, among which contrariety itself is one. But it is difficult to explain on account of some things which mutually expel each other, and are found to be maximally distant under the same genus, and yet are not contraries, as two substantial forms, for example, the form of fire and water under the genus of body, two forms of animals, for example, of man and worm under the same genus of animal, for they are maximally distant among themselves, because they have many intermediates less distant, or disagreeing, for it is not required for maximal distance that more and less be found in the forms themselves, or a certain successive expulsion; both because some immediate contraries are given, which do not successively and gradually, but indivisibly and not by parts expel each other, as even and odd, healthy and sick, and therefore it is necessary that one of them be in a capable subject; but others are mediate, as white and black, for it is not necessary that one be present; and similarly error and knowledge, hatred and love are contraries, and yet they do not expel each other successively, but simultaneously and totally.

Nevertheless it must be said that this special repugnance consists in what we have said that contrariety has a middle with positive extremes, for the less latitude an opposition has, and the more it constrains, that one be affirmed or assumed, and the other relinquished, the greater it is, the more latitude it has, and less constraint, the more it leaves of middle, because it is not necessary to assume one of the extremes, but a middle can be assumed, but extremes constrain themselves more, and leave less of middle, the more one of the extremes themselves is more universal, and leaves less determined distance in being repugnant to the other. And thus contradiction lacks all middle and latitude and distance, both on the part of the forms themselves among themselves, and on the part of the subject in which they are, because it is between pure negation and affirmation, that is, between being and non-being. But privation and form also lack a middle among themselves, since privation is a certain negation of form, but nevertheless by reason of the subject it can have a middle, because it requires a determined subject, that such a negation be privation, and because such a determined subject is not always found a middle can be given just as a stone is neither blind nor seeing, because the subject is not capable of sight, and consequently neither of blindness. But truly contraries, although they include or found privation, nevertheless have it imbued in something positive, because contraries require positive extremes or forms, between which contrariety is found, which however must be received in the same subject, because contraries must be found concerning the same, that is, concerning a subject capable of both. Wherefore not only by reason of determined subject, that is, having capacity of both contraries, but also on the part of the extremes themselves, it is necessary that a determined distance and opposition be founded between the contraries themselves, because contraries must be comparable to each other, because one is said to be better than the other, as virtue better than vice, knowledge than error, whiteness than blackness, health than sickness, etc. but those which are under a different genus are not comparable, but are more distant than that they can be compared, because they cannot be transmuted to each other, nor one be made better than another, just as white is not said to be better than quantity, or figure, but one is said to be better by comparison to its opposite under the same genus; and therefore it is necessary that contraries, because they are comparable to each other, and transmutable, be contained under the same genus, and consequently have a determined distance, not only by reason of subject, but also by reason of their genus, which privative and contradictory opposites do not have, because the extremes between which they are found are not under the same genus, namely negation and form, but further they are not opposed in regarding, like relatives, but in transmuting and expelling from the same subject.

But it is added in the definition of contraries, that they not only be under the same genus, but also that they be maximally distant, that is, that under that genus they are related as terms, or ultimates, between which transmutation is made, and process from one to another, for in those which differ in physical genus, transmutation from one to another is not to be taken, nor is there a middle through which transition is made, because they do not communicate in matter (physical genus is called matter) just as quality does not pass into substance, nor substance into quantity, but transmutation is made in those which are in the same genus. Whence since in this transmutation there is process from one to another, and it is stopped in some ultimates, lest it proceed to infinity, those which ultimately stop the process and transmutation are said to be maximally distant because they are extremely distant. Whence from transmutation contrariety is rightly gathered, as the Philosopher gathered in Metaphysics 10 and St. Thomas there in lesson 6.

But that from these it may be clear how in substantial forms properly called contrariety is not found, it must be noted that this transmutation is twofold, one without motion, as that which is made in prime matter, as it is pure potency to substantial forms, another with proper motion, namely when some continuation can be found between form and form either according to more and less, or according to addition or diminution of form, which makes it vary, for in substantial forms variation is made as in numbers, in which any addition varies the species, but in contrary and physical qualities variation is made in the manner of continuity, for from this one form is transmuted into another, because by some addition or diminution another is made, just as white degenerating into pale, and into green becomes black, and hot diminishing degrees of heat becomes tepid, and passes into cold. Therefore the first transmutation does not arrive at proper contrariety, but is the principle of contrariety, because any substantial form has adjoined to it the privation of another, but privation is the principle of contrariety, and thus natural principles are said to be contrary with inchoate contrariety, which is privation and form, as we said in Physics q. 2. But the second contrariety is formal and proper. The reason is, because the first transmutation is not made according to determined distance to be overcome through motion, and in the manner of a certain continuity, but in the manner of mutation, and this is so because any substantial form by this very fact that it is substantial gives first being, which is being simply, and thus excludes another through incompossibility, because it is repugnant in the same subject for two forms to be equally first, and give first being, which is being simply, and thus they are not opposed according to some maximal and positive distance under the same genus, but according to first and total being, and not first, or not total, between which there is not latitude, nor divisible distance, but indivisible opposition, concerning which we also spoke in Physics q. 2, and q. 19, and also above in question five.

But the second transmutation since it has divisible transition, and determined distance on the part of the extremes themselves, or forms between which it is found, insofar as between the forms themselves there is some continuation, or succession according to more and less, by reason of which one form is more easily or with more difficulty removed from the subject, and gives place to another from its own proper nature which is also found in habits themselves, and acts, just as remission of love gives place to hatred, and he who remits virtue, gradually admits vice: therefore perfect and consummated contrariety is founded in this kind of transmutation, because perfect latitude is found in it, according to which forms are transmutable, and are maximally distant under the same genus, which is the definition of contraries.

Thus therefore substantial forms although they are under the same genus, and can have distance according to greater or lesser agreement, nevertheless do not have the nature of more or less in approaching or receding from each other, such that they are transmuted from one to another through motion. For distance can be taken in two ways. In one way, as it is opposed to agreement and similarity, and thus it is the same as dissimilarity. In another way as it says recession of continuity and propinquity; and thus in the first way there is distance in relation, in the second in quantity, or divisibility. And in the first way it can be found in substance, because some things agree more, and others less under the same genus, and thus participate more in similarity or dissimilarity. But in the second way there is not divisibility, but in quantities distance according to divisible latitude, either between form, insofar as such forms are that through addition or diminution they are varied, or insofar as according to more and less they can increase or decrease, and by reason of that more or less exclude the opposite form, and when it maximally excludes, or is opposed then it is maximally distant. Therefore forms which from their own proper nature cannot found exclusion in the manner of latitude and divisibility, but per se and from the extrinsic without any latitude and divisibility exclude each other, do not found contrariety. Which doctrine can be seen in St. Thomas in Metaphysics 10, lesson 6, and Metaphysics 11, lesson 12.

But to that which is said concerning acts of error and knowledge, hatred and love, it is responded that they also have divisible latitude, because they admit of more, and consequently per se and from the intrinsic, they more or less exclude each other from the same subject, according as the opposite form is more rooted and intense, and is expelled with more difficulty. And although also some substantial forms are expelled with more difficulty than others, nevertheless that is not from the very nature of form, which from its proper nature has more or less inherence, but on account of the dispositions, by which form is introduced and conserved in the subject, and these admit of more and less. But what is said concerning mediate or immediate contraries, it is responded that all contraries have a middle on the part of the latitude of forms, because they admit of more and less, if such contraries are of the genus of quality, for even and odd are of the genus of number, nevertheless not all have latitude and middle on the part of capacity and indifference of subject, because in some the subject is so determined that it must necessarily have one or the other contrary, and with respect to a subject thus determined and disposed some contraries are said to be immediate, but those which have a subject not so determined that it necessarily has one of the contraries, with respect to it are said to be mediate; and thus St. Thomas explains in Metaphysics 10 cited, lesson 10.

I SAY SECONDLY: Contraries in intense degrees naturally repugn being simultaneously, not however by absolute power as far as is from the force of contrariety, although from something adjoined sometimes it is impossible. The first part is sufficiently manifest, both from experience, because with heat increasing we see cold is not compatible; and from the definition, because contraries fight among themselves, therefore something must conquer, and another yield, or be expelled, otherwise the fight would not be terminated, but when one contrary is in an intense degree, it perfectly subjects the subject to itself, and conquers it, therefore it is necessary that it expel the other opposite, because it is an impediment, lest it perfectly subject the subject to itself. Finally, motion is between contraries, therefore approach to one has for term from which recession from another, but the term from which is excluded through the term to which; therefore one contrary expels another.

The second part has greater difficulty, and is denied by some, because contraries bring with themselves privation, and if they are posited simultaneously, it follows that there will be form, and its privation, which not even by absolute power can stand; besides that in some it is altogether impossible, e.g. that error and knowledge, hatred and love, even and odd, and other similar things be simultaneously. Wherefore it is necessary to give a reason why some can be found simultaneously divinely, some not.

I SAY THEREFORE: That since all contraries are founded in privation, all agree in this that they must be in themselves deprived of another contrary, because any form and nature on account of its limitation has privation of another. However this is not properly privation of contraries, but a certain negation imbued in the essential concept of any limited being, just as man has negation of stone, and lion, etc. Secondly, contraries have privation with respect to subject insofar as they expel each other from the subject, in which they inhere, and not only from the nature and predicates of essence, or form in itself. And in this way this privation does not belong to all forms, for some are compatible in subject, as heat and color, and similar things, but others expel each other, and are contraries. But in these there is still a difference, because some have this privation expulsive of opposite form from subject as if secondarily, and consequently to the information of form itself in subject: but some have it as if antecedently, and on the part of subject required, that such form be subjected in that subject, and inform it, so that the subject cannot receive one contrary, unless first it supposes in itself privation of another. When therefore contrariety is related in forms in the first way, since privation, or expulsion of another is a secondary effect after information of form, it does not repugn to be impeded by absolute power, because it is privation secondarily consequent, not pertaining to essential information of form just as also it stands well that two quantities be penetrated, and not expel each other from place, because that expulsion is a secondary effect of quantity. Then, unless something else obstructs, well will such an effect be able to be impeded in contrary forms, even if it be privative, and expulsive of another form, because namely the privation itself of form is not required antecedently, and on the part of subject for this, that it receive another contrary. The reason for this is, because all expulsion of some things from subject, is born from something, which per se is expulsion, but per se first expulsion is between being and non-being, which is the first nature of all oppositions, not consequent from something presupposed, and therefore contradictory opposition is the root, and principle of other oppositions, therefore in these, in which per se first, and essentially the very nature of exclusion is found, in no way can there be conjunction even by absolute power, because the essence of one consists in exclusion itself. But where one is not essentially exclusion of another, one will be able to be with another, even if naturally it follows another in the manner of proper passion, because this resultance can be impeded. But if antecedently negation of something is prerequired on the part of subject, that opposite form be received, then it will not be able to be conjoined in such subject, because negation itself, which is presupposed is essentially exclusion.

But if it is said, negation of contrary is required on the part of subject not essentially, but naturally, indeed that negation, and expulsion is caused from opposite form introduced, but is not acquired in subject prior to form to which it follows, as negative to positive, therefore it is not distinguished from consequent expulsion, and thus something will be able to be simultaneously seeing and believing, loving and hating the same object sick and healthy in the same part, against this it is, because by this very fact that privation is required on the part of subject, it does not pertain to disposition, since privation is not something positive determining and disposing, but pertains to suitability and capacity of subject, that it receive some form, whence if without such privation it is incapable, in no way without it can form be received: for one believing, for example, requires that the subject be capable of believing, that it be not seeing, because it requires the object to be not seen denominatively from negation of seeing, and requires the subject to be in motion, or not to possess through vision, but one seeing requires subject resting in the thing seen, but rest is privation of motion. Similarly one hating requires subject fleeing, which excludes rest, which is in love, and the same is in sadness and joy, and others which are opposed according to flight, and prosecution, or rest; sickness also is tendency to death, but healthy is rest in vital form, that is, it seeks that soul inform without motion to corruption. But what is said that such negation, or exclusion is caused, and follows form opposite introduced, it is responded that whether that negation required on the part of subject is caused by form, e.g. by act of faith, negation of seeing, or is presupposed from another cause in subject, which is truer, nevertheless that is truly required on the part of subject, that it be capable of such form, and therefore capacity for the opposite is not left in subject once having such form, because its privation required on the part of subject obstructs that it receive another. But in other forms expulsion of one form precisely follows form and its condition, which is introduced, insofar as it is incompossible with another, and thus precisely is its expulsion, but expulsion always follows expelling cause, that is, form as its secondary effect, as negative to positive. But when negation habilitates, and disposes subject, that it be able to receive some form, that negation is not precisely expulsion, and secondary effect of form, nor required in subject as expulsion of form, but as condition pertaining to its suitability that it receive, and therefore with reception posited, it does not stand that the opposite be posited, but with cause of expulsion posited, it stands that effect which is expulsion be impeded. And thus I understand St. Thomas I-II, q. 67, art. 3, when he says, that opinion, and faith are opposed with knowledge, or evidence on the part of subject, and not only on the part of medium, or object, because namely it is required for this, that subject be capable of faith, that it be not seeing, and thus exclusion of knowledge is presupposed, that faith be received.

And if you ask, what are these forms, which on the part of subject suppose privation, or exclusion of opposite form, that subject be capable of receiving them, it is responded first, to be forms which are immediate contraries, in which also are included those acts evident and inevident, of flight and prosecution. Secondly, substantial forms. Thirdly, situational forms, which import some distance. The first forms indeed, that they be received, require that subject be in some rest, or motion, or opposite privation, as has been explained; which does not run in mediate contraries, for heat, e.g. that it be received in subject only requires that it be potentially hot, and nothing more. But the second forms, because they are related as substantial forms, which give first being, and consequently suppose that no prior form giving prior being is given. The third, because where there is diversity of distance one distance cannot be simultaneously with another, because thus it would be indistant from it, therefore those forms cannot be simultaneously, which include this diversity of distance.

But you will object: For in habits of intellect, and will the alleged reason will run, because habits of vice and virtue, error and knowledge and opinion will be able to be simultaneously, since these habits that they be received in subject, do not presuppose opposite privation, but only expulsion of one is related consequently to another, therefore they will be able to denominate subject simultaneously, and thus someone will be able to be denominated simultaneously temperate and intemperate, proud and humble, knowing and erring. It is responded that these habits if they are of acquired virtue, do not repugn being simultaneously with opposite habits in remiss degrees, but in intense, like all other contraries, if they are considered only physically and thus one act of vice does not expel habit of acquired virtue as to its physical entity, as is clear from St. Thomas I q. 71, art. 4, and to that extent many acts generating vicious habit are required, and it will expel virtues according to the law of other contraries; for habits are opposed like opposite inclinations, which do not explain themselves in act, and thus are opposed only by reason of physical contrariety, like other contraries. But as to denomination, each habit does not denominate subject for two reasons. First, because in contraries only predominant form denominates, as if in subject there is heat as six, and cold as two, it is denominated simply hot, not truly hot and cold. And thus that habit will make denomination (even if we attend only to physical information) which will be more perfect and intense. Secondly, as to denomination of moral habits, that habit denominates simply, which not only is entitatively in subject, but supposes conversion to its end in subject, for end always predominates in denominating subject inclined to something, even if it has less intense acts, or habits in subject, than those which regard opposite end, because conversion of end seizes the whole supposit. And because someone cannot be simultaneously converted to two ultimate ends of sin and virtue, therefore he cannot be simultaneously denominated proud and humble, temperate and intemperate, although he has both habits entitatively, but only from that, to whose end he is converted. But habits of error and knowledge can never be simultaneously, because scientific habit is always perfect by reason of evidence, by which it perfectly convinces subject, and thus is not compatible with opposite, like intense form which conquers subject.

You will say: Why are contrary vital acts so contrary to each other, that they can in no way be simultaneously, but habits not? It is responded, that acts if they were only productive of their habits as actions and motions to them, and nothing more, would be contrary in the same way, as the habits themselves, or produced forms, just as in physical alterations, for example, heating and cooling, there is the same contrariety, which is in the produced qualities themselves, as we said in Physics, q. 19, last article.

But truly acts of powers are not only actions productive of habits, but also in themselves are perfections and dispositions of power, which by reason of themselves, and not by reason of habits have their opposition. And because they actually explain order to object, and privation, or position in order to it, and not only information of subject, but habit only informs subject, and puts inclination in it and does not actually explain itself towards object, therefore contrariety of habits is not so great, as in acts, nor so perfect.

I SAY LASTLY: In remiss degrees naturally contrary qualities can be, if otherwise between them there is not essential opposition, and prerequisite on the part of subject, that any of those forms be received. This conclusion is taken from St. Thomas q. 8 On Truth art. 14, where he says: "That when forms are in becoming, they can be simultaneously, as while someone is whitened, he is still in blackness. But while he is in remiss degrees he is still in becoming, because something to be acquired is still lacking." And in I p. q. 76, a. 4, he says: "That in mixture there are contrary qualities;" but it is clear that they are tempered, and remiss. But reason is taken a priori, and a posteriori. A priori, because these forms have latitude in growing, therefore also in expelling: therefore something of contrary form can be, before another opposite is totally expelled, and thus unless something obstructs on the part of subject through mode of incapacity, and repugnance, as we have said, as far as is from the force of form having latitude, it does not repugn, that contrary form gradually, and with some latitude enter, and thus not totally exclude another, but be compatible with it in some degree. But a posteriori it is clear, from mixture, and mutual action and reaction; for these are not saved, if contrary qualities are not compatible in remiss degrees, for mixture cannot be, unless forms of elements remain in mixture not substantial but accidental reduced to temperament; but that are contraries. Likewise action and reaction cannot be given, unless agent has form, by which it acts, and receives opposite by which it is acted upon, therefore then contrary qualities must be in subject, and not in intense degrees, because by action itself, and repassion, they are debilitated and tempered, therefore in remiss, or at least one in intense degree, and another in remiss.

The arguments are solved.

First, it is argued: To prove that it is repugnant that two contraries can be simultaneously in the same subject in intense degrees even by absolute power, because this implies, therefore. The antecedent is proved, both from Aristotle in Metaphysics 4, text 27, saying: "Since it cannot happen that contradictories are true of the same thing simultaneously, it is clear that neither can contraries be in the same thing simultaneously." And also by reason, because in one contrary the privation of the other is included from the proper nature of such contrary, but privation is negation of form in an apt subject, therefore one contrary cannot be with another, just as neither privation with opposite form, especially because with that form posited in the subject, its formal effect cannot be impeded, of which one is privation. It is confirmed, because the very information of one contrary is also formal expulsion of the other, and not effective, since one form does not expel another except in the genus of formal cause, and consequently information itself is expulsion, therefore simultaneously with such information the information of another contrary cannot stand, otherwise it would be simultaneously informing and expelled, which is to be informing and not informing.

It is responded that contraries include contradictory or privative opposition not first and per se, but consequently and secondarily, because from the information of one follows the exclusion of the other. And to the proof from Aristotle it is responded, that it is understood concerning contraries according to secondary effect, which is expulsion, according to which it well follows, that contraries cannot be simultaneously, because they include in themselves contradictories, mediately namely and secondarily, not primarily, as has been said. Whence Aristotle adds there: "That it is impossible for contraries to be simultaneously in the same thing, but either both according to something, or one according to something, the other simply."

Therefore he admits that according to something, that is, according to remiss degrees they can be simultaneously, although not perfectly, and according to intense degrees. But to the proof from reason it is said, that one contrary imports privation of the other consequently and secondarily, but it can be divinely impeded and separated, making that those two forms only inform the subject, as to the positive, not as to the privative. Whence that privation, if it is posited in the subject, and in fact is consequent, renders it deprived of opposite form; but we say that it happens divinely, that that privation does not follow, but opposite form is posited in the subject.

To the confirmation it is responded, that information of one contrary is expulsion of the other indeed in the genus of formal cause, not however primarily, but consequently, and secondarily, for also form in the genus of informing has its secondary effects, just as grace has for secondary effect to render adopted son, quantity to extend substance as to place; and yet without these effects these forms can be found divinely. Similarly therefore contraries without privative effect.

Secondly it is argued: Because two forms of the same species, and two substantial forms cannot be simultaneously in the same subject, therefore neither two contraries in intense degrees. The antecedent is clear from the preceding question. But the consequence is proved, because blackness and whiteness are more distant, than intense and remiss whiteness, therefore they will repugn more being simultaneously. It is confirmed, because the same cannot be simultaneously denominated from two contraries, nor moved by double contrary motion. But if it did not repugn that two contraries be simultaneously the subject would be denominated from both, since it is informed by these, and would be moved to both, since it acquires them, therefore it repugns that two contraries especially intense be in the same subject, for if they are intense, they denominate the subject.

It is responded that two substantial forms cannot be simultaneously for the reason often adduced, because each gives first being, and simply being, and thus necessarily supposes every other excluded, which is also first. But accidental forms of the same species although they agree more specifically and entitatively, than two contrary diverse species, nevertheless it repugns that they be simultaneously in the same subject, because by this very fact, that they are in the same, they are not plurified, but become one. Whence on account of greater agreement it repugns more that they be as distinct and divided in the same subject; and much more, that one be intense another remiss, which terminations are opposite, and one imports exclusion of the other, for remission imports such degree of quality without further addition of degree, for if it had further, it would not be remiss; and thus it repugns to be conjoined simultaneously with intense. Which does not run with respect to qualities of diverse and contrary species.

To the confirmation it is responded, that denomination is made from predominant quality, as has been said, as if there is heat as six, cold as two, it is denominated simply hot. But if through Divine power two contraries are in intense degrees in the same subject, each will denominate positively, not however with privation of the other, because this is impeded divinely, for thus form affects subject, that it does not exclude contrary, and thus it will be denominated hot and cold, not hot and not hot. But concerning contrary motions, which tend to contrary forms, we say that there is the same reason as concerning the forms themselves, which they acquire, and in that way in which those forms will be compatible, so will motions be. But if motions are contrary according to approach and recession, if there is approach and recession concerning the same form as generation and corruption of the same, they cannot be joined simultaneously. But concerning diverse as generation of one and corruption of another, they are not opposite motions, but rather are connected, although in the case where God conjoins two opposite qualities, thus generation of one is given, that not corruption of another, since they are conserved simultaneously.

Lastly it is argued against what we say: That in remiss degrees naturally contraries can be, for remiss contraries are truly contrary qualities: therefore the definition of contraries belongs to them, but this is, that they expel each other from the same subject, therefore also remiss qualities expel each other from the same subject. The antecedent is clear, because otherwise if they were not contrary, the whole contrariety of qualities would consist in degrees, not in the very substance of qualities. It is confirmed, because remiss quality can act similarly to itself, therefore expel contrary, but not exceeding and intense contrary, therefore remiss, therefore remiss qualities from the same subject. It is confirmed secondly, because otherwise it follows, that subject will be able to be denominated from two contrary forms, for example, from heat, and cold, and be moved by contrary motions in remiss degree, indeed something supremely hot will be able to impress intense heat, e.g. as six, in cold as two, destroying nothing of cold, because cold as two is compatible with that degree of heat as six, therefore it does not expel it.

It is responded that remiss contraries have contrariety in an imperfect mode, and as if in becoming, whence they do not exercise every nature of contrariety on account of the latitude, which subject has with respect to both in remiss contrary. And when it is said, that contraries mutually expel each other, it is responded that they mutually expel each other in act, or aptitude, for in some state, and degree they do not expel each other in act, but are compatible in the latitude of subject. And when it is insisted, because otherwise contrariety would be by reason of degrees, not truly by reason of entity, it is responded that it is by reason of entity posited in due state, and mode, so that the nature of contrariety is in entity itself, but intensity or remission is required, as condition and state, for mode of expulsion, and thus they do not expel each other absolutely in any degree, but as much as is introduced of one, so much is expelled of another in degree repugnant to it, but in imperfect degree they do not expel each other.

To the first confirmation it is responded, that hot in remiss degree will be able to act similarly to itself in subject, where it will not have found similar degree of heat, but then it will not expel of opposite cold except that, which repugns to the introduction of such heat, and because in remiss degree it does not repugn to it, if it will have found only cold in remiss degree, it will destroy nothing of it. But if in intense degree only, it will remit of it as much as is required, that it can be simultaneously with it according to nature action, and reaction, as if there is heat as seven, and cold as four is applied, it will reduce it to mediocrity as six, or as five and the rest will remain of coldness.

To the second confirmation it is responded those inconveniences do not follow, because as we have already said denomination is not made except from predominant quality, and thus it will be denominated in remiss degrees not absolutely hot and cold, but tepid; but contrary motions do not repugn in remiss degrees, just as neither qualities themselves, as has been said. To the second inconvenience it is responded, that in that case, if subject is cold as two, without any other heat, then hot as six acts in that cold, and will destroy because although degrees of cold as two are compatible with six degrees of heat, per accidens nevertheless, because heat is introduced through alteration, and mutual action, and reaction, therefore it will destroy something of cold, and finally consume it; this however is on account of the introduction of heat made in that way; but on the part of subject, it does not repugn with heat as six cold as two speaking in the genus of formal cause; but if subject has cold as two, and simultaneously some heat, for example, as one or two, then hot as six will not expel cold, because it will act intending heat, as long as it is compatible with cold as two, not altering and reacting in cold.

ARTICLE III.
What qualities belong to each element?

It is established that at least two qualities are found in each element: for we see that water is cold and moist, fire hot and dry: but the difficulty is in two points.

First, to assign to each element which quality belongs to it in the highest degree, or whether two can belong in the highest degree. Second, if both do not belong in the highest degree, but one in an excellent degree short of the highest, whether its opposite belongs to it in a remiss degree for that part of the latitude which it lacks up to the highest, e.g. if dryness belongs to fire in an excellent degree as six, whether opposite moisture belongs to it as two.

Concerning the first, there are two probable opinions. The first assigns to each element one quality in the highest degree, another in an excellent degree in this order: to fire heat in the highest, dryness in an excellent degree: to air moisture in the highest, heat in an excellent degree; to water cold in the highest, moisture in an excellent degree: finally, to earth dryness in the highest, cold in an excellent degree. Which opinion is very common among Philosophers, as Master Bannez testifies, here in book II, q. II, the Coimbrans in book II on generation ch. III, q. IV, and it seems to be expressly held by the Philosopher in this book II, text 23. The second opinion is specially held by St. Thomas in the same place lesson III, at the end, who affirms that heat in the highest degree belongs to fire, coldness to earth. Air is more moist than hot, but water is more moist than air, but not as cold as earth. But dryness belongs more to fire than to earth. However, St. Thomas does not affirm these things entirely certainly, but probably, for he also admits, in part I, q. 69, a. 1 ad 5, according to St. Basil, that earth has for its principal property, dryness. Wherefore according to this, coldness in the highest degree does not belong to earth, but to water, because there is no other element to which it belongs.

The foundation of the first opinion is taken from two things which it supposes. First, that some quality in the highest degree must belong to each element. Second, that two qualities in the highest degree do not belong to any. The first is clear, both because these primary qualities must have some connatural and proper subject, therefore such quality must belong to it in the most perfect degree, which can naturally belong, since that is taken through order to proper and connatural subject, and because if in an element no quality were found in the highest degree, but below the highest degree, it would be capable of opposite quality in some degree at least. First, as to that part which it lacks up to the highest, since a subject capable of one contrary, is also capable of another, unless it has that in the highest degree; then, since each element has two qualities, if it has neither in the highest degree, it will have something of contrary qualities, and thus it will have all four qualities, which is proper to a mixture, not an element. The second is proved, because to some element, for example air, double quality does not belong in the highest degree, for since it is hot and moist, if heat belonged in the highest degree, it would be as active as fire, and even more strongly, because it is denser. But the same reason seems to be for one element, as for all. Then, because since quality in the highest degree is the ultimate disposition to substantial form, if the same quality in the highest degree belonged to two elements, e.g. dryness which belongs to fire, also to earth, there would be in two the same ultimate disposition to forms of diverse species, which is inconvenient, because ultimate disposition is proper to that to which it is.

From these suppositions this opinion infers, that heat and dryness cannot belong to fire in the highest degree, therefore only one quality must belong, and this is heat, since fire is most active. Therefore dryness must belong to another element in the highest degree, and it cannot except to earth, both because concerning the remaining elements air, and water it is clear, how little dry they are and how fluid; and because by excellence it is called dry, Genesis 1; and because the definition of dry belongs most to earth, namely that it is terminated with difficulty by alien terms, for this belongs more to earth than to other elements. In the remaining elements, air cannot be supremely cold, both because otherwise it would have nothing of heat, since it is excellently hot; and because it would have little of lightness, whose companion is heat, but cold of density, and gravity, therefore moisture will belong to it in the highest degree, which also the definition of moisture testifies, namely which easily yields to alien terms, but nothing more easily yields and is divided than air. But cold in the highest degree will belong to water, both because there remains no other element to which it belongs; and because water is more contrary to fire than earth, since fire is conserved within earth, not within water, therefore since fire is hottest, water will be coldest.

But the foundation of the second opinion is taken from the qualities of earth and water, for from there an argument is made to the qualities of fire and air. For that supreme coldness belongs to earth is deduced from two things. First, from maximum distance from heaven, whose light and motion is the cause of heat, and thus what naturally is most distant from heaven, must be most devoid of heat. Second, because even among the elements themselves, it is more distant from fire, and thus must be more contrary to it, as in situation, so also in quality. Third, because earth is the densest body among the elements most heavy, but it is proper to cold to compress and condense and induce gravity, just as on the contrary heat is the cause of lightness and rarity, and the supremely hot, namely fire is most rare and light, therefore the most dense and heavy, will be supremely cold; indeed if earth were supremely dry, it would naturally be reduced to powders, because the supremely dry is pulverized, as Aristotle teaches in this second book, text 49, and there St. Thomas lesson VIII. But on the contrary, if water were supremely cold, it would naturally be frozen, for we see with cold increasing water freezes, and hardens, although naturally it is fluid. Nor can it be said, that freezing happens in water mixed with some exhalations, not in pure water. For against this is, both because the sea is full of these exhalations, by reason of which it has saltiness, and yet is not frozen; and because for freezing those exhalations, and terrestrial concretions do not seem to contribute, indeed water the more subtle it is, and more purified and thin, is more easily frozen, for cold of itself is compressive of fluid parts, because fluid things are more coagulable, therefore with those exhalations removed, or at least diminished, when water is subtilized through fire, and left to freeze, it will be better frozen.

But that water is more moist than air, and consequently moist in the highest degree, is deduced both from effect, because to sense it seems to be more moistened, and wetted by water, than by air; and also, because water is most terminable by alien terms, as Aristotle teaches in Meteorology 4 text 29, lesson 7, in St. Thomas, and in this second book on generation text 49, but this is the definition of moist, that it is terminable by alien terms; and because air is more drying, than water, for we see things moistened by water, dried by air, not the contrary. Nor can it be said, that air dries per accidens by reason of dry exhalations, which are scattered through it. For indeed if air were so moist, it would not permit in itself these dry exhalations, just as neither does water permit them, for excessive moisture would corrupt dry exhalations by moistening them, therefore if air does not corrupt them, it is because it is not so moist, as water. And similarly if air dries by reason of heat consuming moisture, why will it not also consume its own moisture, just as living things by reason of heat, consume their own moisture? Finally, fish which are in waters are more moist, than birds which are in air: phlegmatic humor also, which corresponds to water is most moist among all humors, therefore also water among all elements.

But if once earth does not have supreme dryness, nor water supreme cold, it remains that we attribute supreme dryness not to air, which appears sufficiently moist, but to fire, but to air we attribute cold, and moisture in an excellent degree not in the highest. And thus one element, namely fire will have two qualities in the highest degree, but another immediately next to it, namely air will have neither in the highest degree. The remaining two elements will have one in the highest, the other in an excellent degree, as has been said.

Both these opinions are probable, and in St. Thomas both have foundation, and as we have seen, and to the arguments of both it can easily be responded, as has been insinuated in arguing, for since we do not see the elements in their total purity, but among these bodies, with which they are easily mixed, we cannot from sense, and experience, but only by probable discourse, investigate this matter.

Concerning the second difficulty, namely whether in the elements there is given some remiss quality contrary to that, which is in an excellent degree, e.g. if in earth there is cold in an excellent degree, whether there is something of heat, it is responded this must be decided according to the opinions already related in the preceding difficulty. For those who hold that in an element two qualities can be given not in the highest degree, consequently are bound to assert, that nothing of opposite qualities is given in it, because if opposite qualities were given, all four qualities would be in one element, which however is proper to a mixture. And moreover, even if one quality is posited in the highest degree, and another in an excellent remiss degree, then because therefore Aristotle teaches in this second book, text 25 and 26, that one element is more easily generated from its symbol, than from its dissymbol, because in the symbol element only one quality must be corrupted, but in the dissymbol two, therefore if in any element three qualities were given as many would have to be corrupted in the symbol, as in the dissymbol, namely two contraries, one in an excellent degree, another in remiss, although in the dissymbol element the qualities to be corrupted are found more intensely than in the symbol. Indeed all elements would be symbols, because in all some quality will be given, in which it agrees with another element, but where there is agreement there is symbolization. Nor does it obstruct, that it agrees in remiss quality, because this does not take away that agreement being true, therefore also true symbolization. Which however the opposite opinion thinks does not urge, because symbol elements, as will be said in the following article, consist in this, that they are similar, not in any way, or in some predominant quality, not in remiss quality. Which opinion Rubio defends here tract on primary qualities question 9, the Carmelites disputation 10, question 1, and others.

The opposite opinion is defended by most, concerning which can be seen the Coimbrans book II on generation ch. III, q. 5, Astudillo q. 4, and others. And truly it has sufficiently efficacious foundations, because a body, which is capable of one contrary, is capable of another, for also an element having some quality in the highest degree can receive something of the opposite at least by way of corruption, as when water loses something of coldness, and admits heat, therefore if in the natural state it postulates some quality not in the highest degree, also in the same state it will be capable of the opposite in remiss degree. Nor can it be said, that it does not have in fact such remiss quality, lest it diminish something of that quality, which it has in the highest degree, for if fire, e.g. had something of moisture, also because of it heat would be diminished, and water having supreme coldness, if it had something of dryness opposite to moisture would always be frozen, and not fluid. But against this is, because the activity of heat is not remitted except through its contrary, but that small, and remiss moisture obstructs nothing to heat, unless it takes away something of dryness due to fire, for if it takes away nothing the whole natural disposition of fire remains, but it does not take away from due dryness, because if fire seeks dryness short of the highest, for example, as six, that it has moisture as two, takes away nothing from the degree as six, but if it took away from that, it would impede the nature of fire, not because it would be against heat, but because against due dryness. But water is not frozen on account of native dryness, which it has in remiss degree, but on account of mixed, and extraneous, which makes as it were glutinous matter, and consequently congelation. Finally, if an element having quality in excellent degree, for example, fire dryness as six, did not have opposite quality in remiss degree, that dryness could grow up to eight in an instant, since it lacks contrary. But the latitude itself of intension does not suffice for succession of motion, but also contrariety to be overcome is required, as is clear in light, which admits latitude of intension, and yet is made in an instant, because it lacks contrary. Whence some of the opposite opinion say, that only from the extrinsic will that motion be successive on account of resistance of substantial form, which cannot be corrupted, unless other dispositions are introduced, which must be made through motion. But this is, what that opinion tries to infer as inconvenient, because if there is not resistance, there will not be succession in introducing disposition, nor from the intrinsic will motion be successive, but per accidens. Wherefore both opinions (as we have said) have that probability, which the opinion related in the first difficulty has, and according to them, one or the other of these must be defended.

ARTICLE IV.

How transition occurs from one element to another, both in symbols and dissymbols?

Two things must be supposed, and in two others there is difficulty. The first that we suppose is that those elements are called symbols which have agreement in some quality, but dissymbols which do not have, from Aristotle in this second book, text 25. But it is understood that they have agreement in some predominant quality, for if they agree only in some remiss quality but disagree in intense ones, the disagreement will be greater than the agreement: and thus they will be said to be simply dissymbols and disagreeing, and agreeing according to something. Secondly, it is certain that both symbol and dissymbol elements can be transmuted into each other, whether mediately or immediately, since they have common matter capable of all those forms.

But the first difficulty is whether one element can immediately pass into any other, or whether it must first pass into some mixture or at least into a more symbol element, than into a more dissymbol one. And the reason for doubting is that earth and water, for example, cannot pass into each other, unless first both qualities of water, for example, are remitted, for in order to be corrupted first the qualities must be remitted, since they are destroyed gradually and successively. Therefore when the coldness and moisture of water are remitted, it first arrives at the degree of four through introduction of heat and dryness, than it arrives at heat as eight, destroying all coldness, therefore at that point, in which all those four qualities are mixed a mixture is generated, before it passes to the contrary element, since with those qualities remitting themselves, opposites are also introduced as remiss and tempered, and consequently as they serve for mixture.

The second reason for doubting, because immediate transition cannot be made from one element to another, even among symbol elements, therefore a fortiori neither among dissymbols. The antecedent is clear, because between earth and fire, for example, which are symbols in dryness, it is required that that density of earth pass into great rarity, which cannot be done immediately, since it must first attain that rarity which is in water, than that which is in fire, because it is greater. But among dissymbol elements as fire and water, heated water does not pass into fire unless first attenuated and resolved into vapors, and thus first passing into air. The reason for these is that from extreme to extreme transition is not made in qualities except through a medium, therefore since dissymbol elements are extremes, transition is not made in them, except through some medium, especially according to density and rarity.

But the second difficulty arises from the prior one, how the Philosopher said in this second book, text 25, that transition is easier among symbol elements, than dissymbols.

For against this is, that this transmutation is founded in contrariety of elements to each other, and activity of the transmuting, but among dissymbols there is greater contrariety, since they are contrary according to double quality, and consequently act with double activity, therefore dissymbol element will be converted no less than symbol, because if in this one quality only acts, in that double, and sometimes there is greater activity, as when fire acts on water through heat, which is most active, therefore water will be converted into fire more easily, than into air. And thus we see by experience, that drops of water injected into fire are converted more easily, than small particles of earth, and yet earth is symbol to fire.

Nevertheless to the first difficulty it is responded that from any element another can be immediately generated, and not only mediately. Some think the opposite, both generally concerning any element, as some in Toledo in this book, q. 7, and specially concerning dissymbol elements, as Rubio tract on generation of elements, q. 1, with others whom he cites. However our resolution is express in St. Thomas in this second book, lesson 4, § It follows, where he concludes: "Universally it is manifest, that any element is generated from any"; and these are the very words of Aristotle there text 24. Nor does it suffice to say, that any element can be generated from any mediately, not however is it necessary that it can be generated immediately from any. This I say does not suffice, because by this reason it can also be said, that any mixture however perfect at least mediately can be generated from any, and yet we do not say, that man can be made from stone. Nor however do we say that it always happens thus, that from any element another is made immediately, but that it can be made thus, nor from the force of its disposition does it repugn, and thus it is not related: as animals, which naturally for their transmutation require to pass through diverse forms, and generations as St. Thomas notes in De Potentia q. 3 art. 9, for elements do not require this from their nature, but transition can be made immediately from one element to another unless per accidens from weakness of agent or from another impediment the opposite happens, but of itself there can be so great activity of element upon another that it immediately converts it into itself, as if a drop of water is injected into maximum fire. And the reason is, that even dissymbol elements do not have qualities so consisting in proportion that with that agreement and proportion removed, they lose their form, as in living things, but they have for disposition quality in such intension, that even if it is removed from that, they do not immediately lose substantial form, but can be altered by contrary quality intensely until another contrary element is generated, as is clear in water which retains the form of element even if it is greatly heated, or evaporated, until it is wholly resolved into another element, therefore it is not necessary, that in transition from one extreme quality to another through remiss quality, loss of elemental form is made, and form of mixture is acquired, or of another symbol element, but the form of element can be conserved, even losing proper quality and acquiring contrary, until contrary element is generated, for all that remission of qualities is not posited in element in such temperament, as is required for mixture, but in that, in which element is still compatible by way of corruption, as will be more explained in solving opposite arguments. And this is the reason of Aristotle and St. Thomas where above, that because all elements have contrariety to each other, therefore any element can be generated from any immediately, because by reason of this contrariety one quality can so continuously act on another, that it totally conquers it, and generates element similar to itself. And although contrary qualities acting on each other react, nevertheless they do not always break out into some temperament permanently made as is required for mixture, but one of the qualities, which is more active, continues action on the element, and finally conquers it.

To the second difficulty it is responded that per se speaking, and from the nature of the thing, transition is easier between symbol elements, although per accidens the opposite can happen. Which is explained in two ways; first, because symbol elements not only have greater agreement in the primary qualities themselves, but also in others, which help the mode of having them, just as air not only agrees with fire in heat, but also in rarity, by reason of which it more easily receives the impression of fire than water, indeed than another element even symbol as earth. Second, this is explained by reason of contrariety itself between primary qualities, because although in dissymbol elements two contrary qualities fight against two, but in symbols only one, nevertheless those two are not of equal activity, nor does each operate so easily, as when only one quality is contrary to another, just as fire is contrary to water according to heat, and dryness, but more difficultly does the dryness of fire remove the moisture of water than the moisture of air; both because the moisture of air is rarer, and thus less resisting; and because the dryness of fire can be more helped by heat joined to it with respect to air, than with respect to water, since in water each quality is occupied around its opposite in the highest, or excellent degree, but in air it is occupied only around one, and therefore can be helped by the other in its introduction, for also heat joined to dryness helps to introduce dryness itself more quickly; finally because dryness is not so active, as heat, and therefore acts more slowly on moisture, than heat on cold. And so two qualities when each has its contrary, on which to act, do not so help each other as when only one quality is to be corrupted. Nor however is this facility of transmuting symbol element of water always found, but can sometimes be impeded, either on account of greater density, or on account of lesser activity of symbol quality, for earth, e.g. although it is more symbol with fire by reason of dryness than with air, nevertheless more difficultly transmutes fire into itself, than fire earth, or even than air itself, or water transmute earth, because the dryness of earth is little active and its density also is more difficultly generated.

To the reasons for doubting for the first difficulty. To the first it is responded, that sometimes the activity of the acting element is so much around the element, on which it acts that it impresses stronger quality, than is required for temperament of mixture, as when a drop of water is injected into great fire. Then, it is said that even if gradually the qualities of one element are remitted, and opposites introduced, it is not necessary, that it be immediately corrupted, and mixture generated, as has been proved by the example of water greatly boiling, which however does not have heat as eight, and consequently retains something of cold, and similarly concerning moisture, and dryness, for mixture is not generated from any concurrence of qualities, but from such temperature, which has mode of permanent, not merely passing to another element. And thus to element four qualities do not belong in its natural state, and from proper nature by way however, of corruption it does not repugn.

To the second it is responded similarly, that denser elements, when they are rarefied, can first arrive at the rarity of middle element, than extreme, not however is it necessary, that they lose proper form, and pass into middle element, but under that rarity they can still retain their form, in state however not natural, but by way of corruption, for they have that rarity through mode of passing. And thus the argument does not prove that middle element must be first, e.g. from earth air, than fire, but that it must first receive middle state, under form however of earth attenuated through mode of exhalation, or something similar, and by way of corruption tending; and similarly water is attenuated into vapors, which however substantially are water, since with cold condensing they become water, and thus that attenuation did not yet constitute air, but by way of corruption was converting water.

To the arguments of the second difficulty it is responded to the first, that transmutation is founded in contrariety required between terms in the beginning of transmutation, insofar as recession from term from which is required, and approach to term to which, but however facilitation of transmutation is founded in greater agreement, insofar as it posits less repugnance on the part of impediments, by which approach to term to which is retarded. To the second it is said, that although in dissymbol elements there are two contrary qualities against another two, nevertheless not with equal activity, and mode, both on the part of rarity, or density, and because one is less active, and because they do not mutually help each other, as when only one quality is to be conquered. But that also in symbol elements not only two, but also all qualities are to be corrupted, that is per accidens on account of ceasing of subject, not on account of contrariety of qualities, which per se conduce to easier, or more difficult transmutation. To the last it is said, that equal comparison is not made between particle of earth and water injected into fire, because this is denser than that, but if particle of earth is attenuated through exhalation with as much tenuity as water, it would be more easily converted by fire.

But how from two elements another third can or cannot be generated, is not a difficulty of such moment, for per se, and in fourth mode always one element generates similar to itself. But per accidens sometimes from contrary elements one third can be generated on account of some impediment of generating proper, although in symbol elements that, either hardly, or never happens, because symbol quality of one is intended by another symbol, not expelled. See Aristotle here text 29 and St. Thomas lesson 4, Master Bannez question III and other interpreters.

QUESTION XI.
ON MIXTURES AND THEIR TEMPERAMENT.

ARTICLE I.
What are perfect mixtures, what are imperfect, and what is their temperament?

Mixtures, generally speaking, are those bodies which are made from elements as from simple bodies: and thus every body which is not an element, but is said to be mixed from elements as if composed from them, is called either perfect or imperfect. This can be understood in multiple ways. First, by reason of different grades, just as living things are more perfect than non-living things; and among living things, sensitive things are more perfect, and among sensitive things there is also great latitude according to how much or how little they participate in the senses. Or secondly, the perfection and imperfection of mixtures can be divided according to how much or how little they are removed from a simple or elemental body, and thus those which require more corruptions to be resolved into elements are more perfect, because they are further removed from the potentiality and imperfection of elements. But those which are immediately resolvable into elements themselves are more imperfect mixtures, because they are less distant from the simplicity and potentiality of an element, and for this reason minerals and certain other meteorological impressions are called imperfect mixtures, because they are immediately or almost immediately resolvable into elements themselves; although in truth some of these meteors are substantially elements, because their substance is vapor or exhalation, which are substantially attenuated earth and water, but sometimes they are composed of only two or three elements, and therefore these are properly called imperfect mixtures, concerning which see M. Bannez in Book II, ch. III, q. 1. Finally, mixtures are called perfect or imperfect by reason of state, namely that which is in becoming and tending toward perfect generation is said to be imperfect by reason of state, as for example when animals are generated, and first pass through imperfect forms, e.g. through the form of an embryo to the form of a horse, then the animal is said to be in an imperfect state, and in the way and tendency, and similarly when there is a transition from elements to a mixture, it is said to be imperfectly mixed, because it is in becoming and tendency.

It is common for a mixture, especially if perfect, to consist of four elements, as Aristotle proves in this book, text XLIX, lecture VIII in St. Thomas and as we have already proved above in q. V on mixture. However, elements do not contribute to a mixture unless tempered and modified, and consequently as corrupted, as not having that intensity of qualities which is found in mixtures themselves according to themselves; but when not only is that intensity of quality actually absent, but it is not even radically competent, because the root which would demand such an intense quality does not remain, then a mixture is made, because another substance is made from the elemental, yet arising from elements. For the fact that sometimes that intensity is actually absent does not constitute a mixture in act, as is clear when it is vehemently heated, and yet has not yet lost the form of water, nor is it a mixture in becoming, because from such heating and remission of cold, a transition to fire can be made.

From these things arises a difficulty among some as to what is that temperament which is required for the constitution of mixtures. Not indeed a substantial temperament, for this is nothing other than the substantial form of the mixture itself, which can be called the temperament itself, either because it results from tempered and modified elements, or because it is the root and principle of tempered qualities, which are proper to mixtures. But that the substantial forms of mixtures themselves are formally composed of elemental forms, as some have said according to St. Thomas in the opuscule on the mixture of elements and in this second book, lecture I, we have already rejected above in q. V. The difficulty therefore can only be about accidental temperament, namely whether that tempering of primary qualities, by which the mixture itself is composed from the qualities of miscibles, is some third quality distinct from them, or only the elemental qualities themselves reduced to mediocrity. For some have wanted that the four primary qualities do not formally intervene in mixtures, but that from those corrupted one quasi-simple quality distinct from them results, which St. Thomas seems to favor in this first book, lecture XIV and in the opuscule on the mixture of elements, where he posits that with the elemental qualities remitted a certain middle quality is constituted, which is proper to the mixture. Others think that those four qualities indeed remain formally in the mixture, just as we experience heat and cold in mixtures, e.g. in animals, and dryness and wetness (which St. Thomas also admits in I part, q. LXXVI, art. IV ad 4) besides those however another fifth simple quality is found which tempers all and reduces them to proportion. And certainly it cannot be denied that some qualities proper to mixtures are found besides the primary qualities reduced to a mean, such as certain occult virtues of herbs or stones, the attractive power of the magnet, the vital power in living things, and other similar things. But nevertheless this opinion posits that fifth quality for the office of proportioning the primary qualities. Others find certain middle qualities between heat and cold, between dryness and wetness, which hardly departs from the first opinion. Others finally think that the proportion of primary qualities is nothing other than the primary qualities themselves reduced to mediocrity and conjoined without any new quality added either proportioning these, or virtually containing them.

We have already spoken about these opinions above in q. V. Certainly it cannot be denied at all that the primary qualities remain formally in mixtures, since we manifestly see their effects, for example, to heat and to cool, and moreover that these qualities have mutual action and passion among themselves, since mixtures have within themselves the principle of corruption, which would not be if they did not have contrary qualities formally within themselves, because one single simple quality cannot exercise contrariety, and consequently corruption, which does not happen without contrariety.

Therefore a plurality of contrary qualities is required even in mixtures and living things, so that they may have within themselves the cause of corruption. Similarly that fifth or middle or added quality is not required precisely for this, that those qualities may be proportioned, and reduced to moderation, for this would be done superfluously by an added quality, since the primary qualities themselves if remitted, by this very fact remain moderate and tempered, and mutually compatible in the subject, therefore that added quality is neither necessary for those primary qualities to be rendered moderate, nor for them to be compatible together in the subject, for by the very fact that they are in remitted degrees they have both, and render the subject in which they inhere temperately disposed. Nor can an instance be brought of the concept of the second operation of the intellect, which is distinct from the concepts of the first operation, and it is probable that it is a certain simple concept formed from the first apprehensive concepts. But this does not stand in the way, because in mixtures that simple quality has no other special office besides that proportion, and moderation of primary qualities, which are clearly tempered, by the very fact that their intensity is remitted and diminished, but for this remission there is no need for an added quality, but absence of the more intense degree. But in the intellect according to the diverse combination of concepts, a diverse representation is made, which certainly requires a diverse quality, and not only diminution of intensity, and of degrees in concepts, and if that representation is reduced to unity from the very mode of representing, it also requires a single concept and quality, and therefore in the second operation of the intellect, or in the mental proposition a certain mode of concept is probably posited reducing to presentable unity, and representing in a distinct mode, than the simple concepts of the first operation.

Finally, that besides the primary qualities tempered to mediocrity, other qualities are given which are proper to mixtures, not indeed taking away the primary ones, but supposing them, and using them as instruments, is manifest in the examples brought of occult virtues and vital powers, which although they require heat and other qualities for the constitution of the organ and their exercise, nevertheless those powers are distinct from heat and cold, and similar things, as being vital powers, and having vital actions distinct from heat, and other qualities, although ministered through them as through instruments, as will be proved more widely in the book on the Soul, question two and three.

But if you say: For health and diseases, and other similar things which result from the suitable disposition of primary qualities, are qualities added to the primary ones, therefore similarly in the mixture there will be that added quality which proportions and reduces the primary qualities to temperament, it is answered that health, sickness and beauty, and similar things are distinct qualities resulting from the due or undue proportion of humors, because they not only make the mixture itself of primary qualities by moderating them, for this alone a distinct quality was not required, but because beyond that mixture of qualities, they conveniently or inconveniently dispose the subject in order to conserve or corrupt life itself, or the due proportion of parts, or humors it is one thing for qualities to be mixed into one temperature and moderation, another to be conveniently or inconveniently disposed in order to the subject, not only according to primary qualities, but also according to vital ones. And a sign of this is that these dispositions of health and sickness are not found in all mixtures, in which however a mixture of qualities is found, but only in animals.

ARTICLE II.

What is the temperament of equality, and to weight, and whether it can be given?

The temperament found in mixtures can be taken in two ways; in one way for temperament according to proportion, in another way for temperament entirely equal. The first is usually called temperament according to justice, or according to the due, or exigency of the subject, because it is such as the proportion of the subject demands. The second is usually called temperament to weight, because namely the qualities are so mixed in equilibrium, that neither exceeds the other, but all concur in the same degree and weight. And therefore it can be found in only one way, because it consists in the indivisible. But the first can be found in many ways according to the diverse exigency and nature of the subject. Whence it is usually named by diverse names, for sometimes it is called simple difforme temperament, namely when only one quality predominates, but the rest are reduced to equality: but sometimes composite difforme, namely when two qualities predominate, and the rest agree in an equal degree; and in these there can be more and less according to infinite combinations, because temperaments can be varied in infinite ways, just like figures.

That proportional temperament is given and according to the exigency and due of any subject is certain, because many mixtures are found in a state perfect and natural to them, and therefore then a temperament natural and due to them is fitting. The difficulty is, whether temperament is given in complete equality or equilibrium and to weight, both in primary qualities, and in motive qualities according to place, as in gravity and levity. For on the one hand it does not seem to repugn, that the miscibles themselves, or qualities are so refracted, that as much remains of one as of the other, e.g. that heat is diminished as four, and cold also remains as four, or of each remains a degree as two. For in this nothing appears of repugnance especially, because this does not repugn on the part of the subject, since the subject is capable of both contrary qualities in a tempered and remitted degree, nor on the part of the agent, because if in some body, e.g. heat and wetness dominate, then it is acted on by something dry and cold, so that gradually heat and wetness are remitted, and gradually also cold and dryness increase, it must necessarily come to one point in which all are equal, otherwise they could not pass to greater dryness, and coldness, unless first coming to equality, therefore at least for some time temperament to weight is possible. It is confirmed, because touch in man is most perfect, as Aristotle teaches in II On the Parts of Animals ch. XVI, and St. Thomas in I p. q. XCI, a. III ad I, but touch only senses the excellence of tangibles, as Aristotle says On the Soul, text CXVIII, for it senses that in which its proportion and temperature is overcome, therefore it is necessary that such a sensory have equality of those qualities to weight, for if some quality exceeded in it, the excellence of such a quality would not be sensed. Similarly temperament to weight is the most perfect of all, because it most perfectly distances itself from extremes, namely from qualities supremely intense therefore it is owed to some most perfect mixture, which is man, especially in his most perfect state, as it was in the state of innocence, or will be in the state of glory, or was in Christ the Lord, although in reality it does not befit an animal or living thing according to all parts, because some parts are heterogeneous, and demanding diverse temperament, and mixture. It is confirmed by the authority of St. Thomas, who in I p. q. XCI, art. I in the body and ad 3, teaches that in man is the greatest equality of complexion, and removal from contraries: therefore it is temperament of equality to weight, because this is of greatest equality.

Nevertheless it must be said: That although on the part of the mixture itself it does not repugn to have some temperament to weight, yet it repugns on the part of natural agents and on the part of the mode of acting, because they always act according to some predominating quality, and much more does it repugn in living things, especially according to all parts which demand diverse temperaments. Many follow this opinion, who can be seen in the Carmelite Course, disp. XII, q. 1, and Bannez, book II, ch. VII, q. 1. And it seems to be manifestly of St. Thomas in III, dist. VI, q. I ad 4, where he says: "That it is impossible that complexion come to such equality, that one of the contraries does not predominate, because otherwise mixture would not happen unless one acted on the other dominating by reducing to the middle, the other resisting, and especially this is necessary in the human body, that heat operate because of the operations of the soul which need heat, as an instrument, as is said in II On the Soul." But the reason is, because although elements concur to the mixture by offering it matter whence it may be made, yet also some of them must be more active, and predominate efficiently in the other, for action is always from the proportion of greater inequality, therefore it is necessary that what is stronger, also more vehemently impress its qualities, because from a stronger cause a stronger and greater effect follows, and thus all qualities will not be equal to weight by this very fact that excess of the agent over others is required for acting. Nor can this be tempered by saying, that more active elements can be of lesser quantity, and density, but those which are less active are more dense, and thus what is lacking to one in intensity and activity, is recompensed in another through density, and thus they concur to equality of weight. But against this is, that with all this posited action will still be impeded, which is always from the proportion of greater inequality: therefore if for this, that equality of temperament to weight may result, equality of acting is supposed in those concurring, and acting, whether this happens through that recompensation or not, action is taken away, for it is not to be understood, that one of the miscibles behaves purely passively, and the other actively, but both concur actively, and contrarily, and by destroying the other, therefore if qualities are supposed to weight librated in effects, and in agents, in whatever way that may have been, they will impede themselves in acting, whether because of intrinsic equality, or recompensed in the qualities themselves extrinsically.

It is more difficult, if it is said that a mixture can be made not through the action of the miscibles themselves among themselves, as when there is true mixture, but by some third thing, for example, by heaven or another universal cause which has efficacy of tempering to weight all qualities of elements concurring to mixture. Nevertheless even in this the reason given runs, because heaven does not effect mixture, unless by helping the elements themselves, and by means of qualities of such elements, which shine forth in mixtures, therefore it is necessary, that some quality of elements be conquering, and predominating, otherwise action would not result. And the reason for this is, that heaven does not produce mixture, unless with motion and alteration intervening, because it is the first altering, and consequently so impresses on elements that it moves their qualities, so that they are altered and alter, and make true mixture, therefore in the same way it is required, that one quality overcome, and dominate others, so that it can act on that even with the motion of heaven altering them presupposed, therefore they can never be so equally tempered to weight, that one quality remains entirely equal to another. Therefore only by God can this equality to weight be produced, by making one mixture without any preceding alteration, and mutual reaction of miscibles.

But the second part about living things is manifest, because heterogeneous parts demand diverse temperament, just as a diverse degree of heat must be in the heart for generating spirits, than in the hand or foot for moving, and bones are drier, and harder, than other parts, therefore they cannot be equally tempered to weight, for they would be homogeneous. Nor can it be said, that if one part exceeds in heat, another exceeds in cold, and thus by recompensing one with another the whole living thing is rendered of equal temperament. For against this is, that this is not to posit temperament to equality in any member, but each to be unequal to another, but the whole itself to be rendered equal according to proportion; besides that heat must always conquer in an animal, because it is the principal instrument of vital actions. But if it is said, that although diverse parts of animals have diverse temperament, yet the sense of touch, which is dispersed through the whole body, has temperament to weight, against this is, that touch does not consist in indivisible temperament, since in some parts it is more effective and vivid than in others, as in the extremities of the fingers, and consequently in some it has some quality more predominating, and less reduced to equality, than in others. Besides that the sense of touch does not render the whole animal tempered to weight, since many qualities remain of dissimilar temperament and diverse qualities, in which they have some excess, just as in the heart there must be greater heat than in other parts; whence that in the sense of touch they are tempered to equality, does not make those parts absolutely reduced to weight, but relatively, that is, as is required for the sense of touch.

But what we add, that quality to weight is not given even in motive virtues, rests on almost the same foundation, because if equality to weight were given in locally motive virtues, that body could not be moved to any natural place from its own principles, and if it were not a natural body, indeed it would not have a determined place in the universe, because thus there would be equal levity and gravity to weight in some body, one would act as much as the other, and thus if gravity drew downward, it would be impeded by levity moving upward. Whence neither would act, because from the proportion of complete equality action is not given, and thus it would not have a determined place, for all places of heavy and light things are up or down, but neither would befit such a body, with gravity and levity impeding each other. Nor can a middle place be given between air and water, for example, because since between these two no place mediates in the universe, but they are immediate to each other, it is manifest that in the universe no natural place is naturally given for some body, which would be in equilibrium heavy and light. But if it were made by God, either a natural place would not be owed to it in the universe, but it would be equally well wherever it was placed, just as if some part of heaven were placed in this lower world, or it would pertain reductively to a double element, namely of water and air, and could be found in either, just as animals which live on land and in the sea. But if it is said, that gravity could preponderate in that body by having greater density or levity by having more heat, which is more active, although they were equal in intensity, against this is, that levity seeks rarity, if it arises, heat itself resolves the parts. Whence more dense light bodies are not, and air made dense is rendered less light, therefore that rarity would impede that density with equality of levity and gravity standing and similarly heat, which is the cause of levity would mitigate cold, which is the cause of gravity. And although it is more active than cold, that will be in the genus of altering, not in the genus of locally moving, therefore the equality itself of gravity and levity, if it is to weight, also concomitantly has equality in others concurring to them.

To the first from the beginning it is answered, that it repugns that those qualities are so refracted to equality, because of the natural mode of one acting on the other through mutual action, and reaction which necessarily supposes some of those qualities to predominate. And thus it does not repugn on the part of the subject to receive those qualities in equilibrium if they are given, but on the part of the mode of acting of natural agents. To the instance posited about repugnance, it is answered that in that case if equality of qualities is reached by way of passing, in no point will action cease, just as in the point of reflection rest is given: but if immediately after action and motion are given, necessarily some quality will predominate, and they will not be to weight. But if it is insisted, that it can be that those qualities are equal in intensity, and degrees, although dissimilar in activity, for four degrees of heat will act more than four of wetness, it is answered that by this very fact, that one exceeds another in activity, it acts on it, and will resolve it, and thus will reduce it to lessening, and thus temperament will never remain in that equality of degrees, unless action totally ceases, which indeed for some point, and as if by way of passing can be understood, but permanently by way of temperament cannot be given, since alterative action does not permit it.

To the confirmation it is answered, touch requires proportion not indeed equal to weight and as if mathematical, but physical, and according to some latitude, since we see that in some parts touch is more vivid than in others, and in some animals more, in others less, which would not be if for the sense of touch mathematical and indivisible proportion of qualities were required. But that only the excellence of tangibles is sensed, is true, but for this it suffices that it exceed that proportion, which we have in touch, and thus the argument convinces that not all qualities are sensed through touch, but only those which exceed that proportion of touch, which is not equality to weight, but according to proportion and excess of that proportion is what is sensed. Nor did the Philosopher in that place On the Soul say that complete mediocrity and equality is required for touch, but proportional suffices, and thus he said, as if existing in some mediocrity, where the particle 'as if' is diminutive, and tempering from mathematical rigor. But to that which is added, that equality to weight is most perfect, it is answered that it is most perfect quasi-mathematically, and quantitatively considered, but not physically, and in order to the end of alteration, and motion, because it always requires an active quality predominating, and thus the most perfect temperament is to be judged, not from most perfect equality, but from most perfect fittingness to the end of the mixture, which is its operation, and motion. To the second confirmation it is answered, that St. Thomas affirms that in man is maximally equality of complexion not with mathematical equality, but physical, as has been said, and comparatively to other animals.

QUESTION XII.
ON THE REPRODUCTION OF A CORRUPTED THING.

ARTICLE I.
Whether it is repugnant for a corrupted thing to be reproduced again?

Two extreme opinions are found concerning this. The first was of certain ancients, who said that after determined times the very same things which had already ceased to be would return, which many attribute to Plato, as can be seen in St. Augustine, City of God, Book XII, Chapter 13. Among the Scholastics, however, there were those who thought it was not altogether impossible for something that had been corrupted to return through nature, though not all things, which Scotus considers probable in IV, distinction 43, question 3, and others. The second opinion was at the other extreme, that not even by the absolute power of God can something that had been totally corrupted be repaired. And they say "totally corrupted" to except man, who when he dies is not totally corrupted, but his soul remains, and body, and only the union is dissolved. Thus Durandus in IV, distinction 43, question 3, and others whom the Coimbrans cite in On Generation, Book 1, Chapter 11, Question 2, Article 1.

Similarly concerning successive things, some think that the same motion and time in number can be divinely reproduced, as the Coimbrans cited follow with some in

Question 3, Article 2. Others hold the opposite by a more common opinion, as Master Bannez here in the last question, Rubio, Soto, Ferrara and others, whom the Carmelites cite and follow in Disputation 13, Question 2.

I SAY FIRST: Any permanent thing once corrupted cannot naturally return the same in number, but it can supernaturally. About this second there is not so much difficulty, and St. Thomas can be seen in Quodlibet IV, Article 5 and Contra Gentiles IV, Chapter 81. For concerning man it is an article of faith that the same in number will rise again, and the same reasoning is for the rest, even if they are totally corrupted, both because in man all bodily accidents totally perish, on which however the individuation of man depends, and therefore they ought to return; and because if the same whole which had perished returns, why will the part which perishes not be able to return, for example, the corruptible form? And because even if a thing is altogether annihilated, no implication can be brought forth why it would be repugnant for it to be reproduced by God, since with some thing annihilated neither is the power of God diminished, nor His action changed or passed, like an action which is motion in a creature. But that the effect itself is annihilated does not put it in a more difficult state to be reproduced than it was before to be produced, when it was nothing, therefore there is not any implication in reproduction with respect to Divine power, although there is with respect to created power, which acts through limited action, and through passed motion, which cannot return, and therefore neither the same effect in number, as we shall say immediately.

But the first part of the conclusion is also the common opinion which St. Thomas holds in the places cited above. And it is taken from Aristotle in the chapter on opposites, where he says: "There is no return from privation to habit," and in Physics V, text 37, he says: "The same health in number cannot return." The authors commonly follow who can be seen in the Carmelite Course here in Disputation 13, Question 1, and in the Coimbrans Question 1, Article 3. Some think this cannot happen because the determination of a cause to this singular effect rather than to another pertains to the first cause, which takes away and determines the indifference of the second cause towards singular actions and effects. And because after God has determined to this action in number, He no longer determines to it, therefore this action in number no longer returns, and consequently neither this effect in number, because it depends on such an action in number. But it remains for these Authors to show whether that denial of Divine determination is undue to second causes from the principles of their nature, or from the will of God alone. If the second, therefore from the nature of the thing alone it is not repugnant for the same in number to return, which is to fall into the opinion of Scotus, since it is reduced to the will of God alone that such concurrence is denied. If the first, it remains to show from what principle of nature such determination once given is undue.

Wherefore we agree with this opinion (for in this it is the common opinion) that for something once corrupted to return the same in number, it is required that the same action in number which produced it also return, since the singularity and unity of a thing in fact of being, when it comes to be in the nature of things, depends on the singularity and unity of action, for action implies the thing itself coming to be, and tendency to being, whence if the coming to be is diverse, the fact of being and the term cannot be the same, unless the diverse action is of such eminence that it contains from every part all that is in the other action even individually, which is found only in Divine action with respect to created action. And for this reason we proved in Question 12 of Physics that the same effect cannot proceed from a double total created cause, because neither can the same action emanate from a double created cause, nor can the action of one totally and in every way contain the action of the other, even as to individuation, because of the limitation of singular created action. And thus that the same action in number returns, on which the singular unity of that effect depends in its coming to be, or as often as it comes to be or is, because the same formal created action returns, through which it was first effected, or because the same action eminently returns, that is, that action which eminently contains the whole action by which that thing was made, even insofar as it is singular. And this we say cannot be found in any created action, but only in the Divine, because no created action, since it is limited, can contain all the individuating principles of another action, namely the same matter under the same signation, accidents, and time, on all of which the individuation of action depends, and consequently of its effect as produced, which however all are subject to Divine action, because by one action it tends to all effects, but does not have its distinct action for each effect; and thus because even with the effect ceasing the action of God does not cease, because even before effects are produced in time, the action of God was eternal, because it is not distinguished from His substance, therefore God can reproduce what has ceased to be, because the same action of God by which He produced always remains. And this is the reasoning of St. Thomas in II, distinction 1, question 1, article 4 ad 3, where he says: "That God does not have an operation determined to some effect, indeed by one sole operation He can produce all effects which He wills, whence the same effect in species which nature produces, God can make without nature operating." But that formal created action which has passed return the same in number cannot happen, not only because God does not will to provide the same concurrence in number which He provided before, but because that action which has passed cannot return the same in number unless the same time or motion in number returns, on whose continuity and unity the unity of that action which ceased to be depends, and by that cessation was discontinued. But the same motion and the same time in number after it has passed cannot return, whether it be continuous time, or discrete, or spiritual, as we shall say in the following conclusion, on which the truth of this depends.

I SAY SECONDLY: Neither by absolute power can a successive thing once passed be reproduced again, and the same is for whatever actions which happen, or depend on some motion. This opinion is expressly of St. Thomas in Quodlibet IV, Article 5, and the Authors related above commonly follow. And the chief foundation is taken from the doctrine of St. Thomas in the place cited, because if a successive thing once passed is reproduced, it will be and will not be the same in number and will correspond to the same imaginary time, and will not correspond, it will have before and after with respect to the same, and finally it will be successive flowing and not flowing, but permanent. Which all manifestly imply. But that they follow is proved, because if yesterday's motion is reproduced today, therefore it is the same in number which was yesterday, and which was today, either therefore it is one through continuity, or through identity. Not through continuity, because yesterday's motion and today's are interrupted by the cessation of such motion, as is supposed, since that motion has already passed and ceased. Not through identity, because identity more requires unity, and is more opposed to interruption, than continuity, therefore if motion is interrupted and divided, it will not be able to be the same in number, but it is interrupted by intermediate rest or cessation, therefore it implies that it is one through identity, which passed yesterday and which is reproduced today; for one and divided or interrupted are contradictorily opposed, but motion and time are interrupted and divided by cessation, just as the surface of quantity is divided by some intermediate body interposed, and does not remain one or undivided.

Nor does it stand in the way to say that it has the same parts of motion today and yesterday. For against this is, that by having the same parts, it simultaneously has division and interruption in them, because those parts have passed and are interrupted by intermediate cessation, and yet through reproduction it becomes one and the same which is not to be interrupted, but undivided, for interruption itself makes division, or rather is division in succession.

The second and third implication is proved, because if past time, for example an hour immediately after it is past, were reproduced either thus reproduced it would make greater time, or altogether the same. If altogether the same, therefore it would be permanent and not flowing, and thus would not correspond to diverse imaginary time, which is repugnant, and is against the very notion of time, whose essence consists in this, that it positively makes that which imaginary time makes negatively, but if with imaginary time passing, posited time does not pass, but is the same hour in number past and which is now, therefore it remains a permanent thing, and not successive, which is against the essence of time. And this is clear, because time does not flow, except by one part ceasing and another beginning, for it is composed of future past and present, but if the same past time were reproduced, it would not consist of past and present, but only of present, for the past becomes present, and thus it would not flow through the cessation of one part and the accession of another, but would stand in the same. Wherefore the identity of time reproduced contradicts the succession and flux of time, and thus its essence and quiddity. But if yesterday's time or the hour immediately past reproduced made greater and were added to the past, therefore it would not be the same time, because the same with respect to the same does not make greater, and thus it will be the same time and not the same. And especially because the same positive time cannot correspond to yesterday's and today's imaginary duration, because if it corresponded to both, it would make addition, because something greater could be measured through that time thus corresponding to both, than if it corresponded to one duration only. But if it does not correspond to both, it will not be the same time past yesterday and reproduced today. Nor does it avail to say that true and positive time can coexist with diverse parts of imaginary time, because this coexistence is not through some real mode, but through comparison of the intellect which does not run in a body placed in a double adequate place, because it ought to exist through diverse wheres and through diverse presences by which it is placed in space. For against this is, that without this coexistence of time, whether it happens through a superadded mode or not, nevertheless it is clear that positive duration, which corresponds to so much imaginary time, cannot found correspondence to another imaginary time, because the same cannot be distant from itself and added to itself, but imaginary time today and yesterday is negatively distant, therefore it cannot be filled without positive distance, just as neither local distance without a new body, therefore positive time which filled yesterday's imaginary time cannot fill today's without positive distance of itself, just as imaginary time is distant; but positive distance with complete identity implies. If you ask about Angelic time whether it can be reproduced by God since it does not depend on motion, it is answered that although it does not depend on corporeal motion, it nevertheless includes before and after in acts, although each act in itself is indivisible, and therefore it necessarily requires to be composed of the passing of one and the coming of another; but this is destroyed if the same is reproduced, and thus the same reasoning runs as for successive non-discrete time.

The arguments are solved.

Against the first conclusion it is argued, because the whole reason why we said the same in number cannot be restored by nature, is because the same action in number cannot return once extinguished. Against which instances are made. First: Because it does not repugn for the same effect in number to be conserved by a different action, which was made by another, just as heat made by this fire can be conserved by another, and by the same continuous motion of heaven the same man or stone is conserved today which was conserved yesterday, and yet the part of the motion of heaven which is today was not yesterday, therefore it does not repugn for different actions, or different parts of action to attain the same effect in number, and consequently to reproduce it, if it is destroyed. Secondly, because if this reason proves anything, it would also prove that God cannot restore the same in number, because the action of God, as passively changing, also passes away, for example, the action by which Adam was made, or the action by which grace now lost was infused, and whatever concurrence of God once given immediately passes away, therefore that reason proves equally about natural causes that they cannot reproduce the same in number, as about God. It is confirmed, because with the same efficient cause standing, and the same matter in number, and quantity and other accidents, the same individuating principles remain, therefore the same individual will be able to be reproduced, for that it is a different time does not matter because time is not an intrinsic individuating principle, but extrinsic. Nor are some examples lacking which persuade this, as when from one water many are made, and again are gathered, the same whole is made which was before, and when an ear or nose cut off is united again to the animal, the same living part remains which was before, therefore the same in number can be restored.

It is answered to the first instance, that the same effect in number can be conserved by different actions in number by extrinsic conservation not intrinsic. We call extrinsic conservation that which is done by removal of contraries, and application of suitable extrinsic things: but intrinsic, which is done by efflux from some cause, just as light is conserved by the luminous thing, but heat is conserved by fostering it, and applying suitable matter, and removing contraries. That therefore which is conserved by efflux from some cause, if the influencing action is changed, will not remain the same effect in number, because it is the same reason for this action thus continuing, as for the first producing. But if conservation is taken according to extrinsics, the same effect in number can be conserved by a different action, because through it the effect does not proceed, nor emanate from the cause, but only those things which are extrinsic to it are applied, or removed from it, which does not vary the individual entity; but if a thing once perishes, for it to be reproduced a cause conserving through extrinsics is not sufficient, but through influx giving being anew. But that the same continued action conserves the same thing in number, although that action has different parts, is because the thing conserved also has one duration continuously, and according to different parts not indivisibly one.

To the second instance it is answered, that the action of God passively taken, and concurrence ad extra which is objected in the creature, perishes with the effect perishing, but because the action which is held on the part of God remains, in which that thing which perished is eminently contained, and the concurrence by which it was made, and every other action of a created cause, even as to individuation, therefore He can produce the same effect in number of a created cause by Himself alone, and also reproduce it, which a created cause cannot do.

To the confirmation it is answered, that from the same agent, and matter under different circumstances especially of time, the same effect in number cannot be produced, for although time is extrinsic to the individual itself in fact of being, it is not however to the individual itself in becoming, and to the action by which it is made and produced, insofar as it is made through action which is change, but time is founded in motion, or change, and according to the unity, or discontinuity of motion, unity and discontinuity of time is given. And thus since in the present it is a matter of reproducing the same individual, which pertains to becoming, and to action, rightly from diversity of time a diverse created action, or change is gathered, but from a diverse action diversity of the effect produced.

But to the examples which are brought forth it is answered, that in that division of water, if the same individual returns, it is because the whole entity of its parts remained under a different termination, whence it can again be conjoined, and become an individual entitatively, but not terminatively, for it is placed under a different termination, or mode of quantity, and thus the termination of quantity according to different parts once lost, does not return, but the entity now divided, and again conjoined returns, because it had simply not perished with its parts remaining divided, and only the termination, and union of parts is varied which does not essentially vary the individual. But it is better said, that a different individual of water is made, when those diverse parts are again conjoined, especially if it is totally divided into notable parts, so that the prior substantial individuation was lost, for this cannot be repaired, but if the greater part is intact, and only small particles are divided, and again united, the first solution runs. But in the second example, the individuation of the whole is not lost, because only some small part was cut off, and therefore it is not wonderful that the same individual remains, yet the same part does not remain, which is newly united in the nature of part, and termination, but it is a new ear, or nose if it had been completely cut off, because then with the cutting made that particle did not remain informed by the soul, nor under the same quantity. Whence if it is newly informed naturally, a new part is made. Otherwise if it were supernaturally restored, as when the Lord restored the ear to Malchus, for then it is done through Divine action, which contains the same effect in number which had been lost, as to all things, which a natural agent does not contain as has been said.

Secondly it is argued against the second conclusion: Because the same action, and successive motion, by which some thing was produced, is contained in the power of God no less than the thing itself, which was produced, and again corrupted, since both are effects of God, and are participated from Him, therefore if a thing once made, and corrupted can be reproduced, so also can the action, and successive motion which had passed away. It is confirmed, because God can reproduce a past instantaneous action, for example, illumination, because this since it is instantaneous does not depend on succession of time more than the permanent thing itself, therefore similarly it will not repugn to reproduce a successive action already past, for there does not seem to be a disparate reason. It is confirmed secondly, because if motion cannot be reproduced, it is chiefly because of dependence on time, but this dependence, is either on real time, or on imaginary. If on real it is to beg the question, because this time is essentially the very motion itself, and thus for the reproduction of motion to repugn because of time, is for motion to repugn being reproduced because of motion. If on imaginary, besides that this time is something fictitious, on which a real being does not per se depend, it is also still insisted, because just as whiteness which is intrinsically individuated by this subject, can remain separated from it retaining order to it, so it will not repugn for this real and true time to remain in another imaginary time, yet with order to the past imaginary.

It is answered that God contains that action, and motion in His omnipotence according to its mode, and nature, that is, as intrinsically dependent in its unity on the continuity of time, which dependence the unity of a permanent thing does not have, and therefore the latter can be reproduced the same in number but not the former. You will insist: Therefore something is rendered impossible to the omnipotence of God, and since omnipotence necessarily requires the possibility of any creature, with one rendered impossible, the whole power of God would be changed. The consequence is clear, because that motion, and that action was possible to produce, but with it passing it is no longer possible, therefore that creature is rendered impossible. It is answered that nothing is changed of the omnipotence of God, nor of the possibility of the creature, because that motion in number, was thus possible for that time, and impossible for others after it passed away, and thus it stands in the same way now, as before, nor does it acquire a new impossibility, but now it is possible for that time in which it was, and impossible for another, which it also had from the beginning. Which does not run in a permanent thing, which is the term of that motion, and from which it takes its species, for motion takes its species from it, with a certain dependence on the unity of time in its becoming, which the term itself does not have in fact of being.

To the first confirmation it is answered, that an instantaneous action depends on an instant of time, just as a successive action on succession, and therefore cannot be reproduced in another instant: but immanent actions if they are qualities, will be able like other qualities to be reproduced by God not in a vital mode, but as they are certain entities; for in a vital mode they say essential order to a created vital power, but from a created cause no effect can be reproduced. But if they are actions, and not qualities, it must be spoken of them in the same way, as of other instantaneous actions.

To the second confirmation it is answered, that motion depends not only on positive time, which in reality is a certain motion, but essentially connotes imaginary time, as corresponding to positive time itself, just as positive place corresponds to, and fills imaginary place. And although imaginary time is a certain negation, which does not stand as a cause on which a positive being depends, it can however stand as something essentially required, without which it is not found, just as without the negation of a lion man is not found, and without obscurity faith is not found, and thus of many others, on which negations however they do not depend as on causes. And to the last instance it is answered, that positive time cannot be saved without correspondence in fact to the imaginary, and with only aptitudinal, because it is of the essential nature of time, that it be a successive being in act, and flowing, but not successive in potency, and aptitude; whence it ought actually to have distant, and succeeding parts therefore also actually corresponding to the distance of imaginary duration or filling it, just as positive place, the imaginary. But an accident is not essentially inhering in act, but in aptitude, and therefore its individuation is saved through order to the subject, not through actual correspondence, which is done through conjunction to it.

ARTICLE II.
Whether all corruptible things have a determined period of duration from nature?

We speak of the term naturally imposed on the duration of corruptibles according to intrinsic disposition and temperament, for with respect to violent and extrinsic causes, by which something can be corrupted, a certain term cannot be designated, because it happens by accident and fortuitously.

I RESPOND: Therefore all corruptible things have from within a determined term of their duration, in the way that they are corruptible, yet not all have the same term. This is taken from Aristotle in the present book, chapter 10, text 57, and there commonly the interpreters, as Master Bannez, the Coimbrans and others. And it can also be seen in St. Thomas in II, distinction 19, question 1, article 4. I said: In the way that they are corruptible, on account of the elements, which can be corrupted in parts, but not an entire element. However, a term of duration is imposed on things. First indeed by the Divine will and ordination. Whence it is said in Job 14: "You have appointed his limits, which cannot be passed." And that all things are finally to be ended at least on the day of judgment is clear from that in II Peter: "Seeing then that all these things are to be dissolved," etc. Second, the term of duration of corruptibles depends on the universal cause which is heaven, because it is in perpetual motion and therefore ought to cause some contrariety and alteration, which brings an end to each thing, and corrupts it, and generates another. Third, this term arises from the intrinsic cause of corruptible mixtures, because they are composed of contraries, which act on and are acted upon by each other, and consequently cause alteration, which is the way to corruption. And since active and resistive force are finite and limited, it is necessary that they have a finite and limited term of acting and being acted upon, and thus finally cease.

But the second part of the conclusion is manifestly clear from experience itself, since some animals are of longer life than others, as men than sheep or horses, and among inanimate things, certain stones and metals than living things. For which complexion helps much, which becomes more uniform, and has more homogeneous parts, for these are better conserved, but where there is multiple variety, and diverse temperament of parts, there is more contrariety, and consequently more corruption, because accidents are more diverse and opposed. Greater concoction of moisture also contributes, and more tenacious, for less tenacious and fluid moistures more easily dissolve, as watery moistures, which are mixed with cold, which is a less vital temperament. Hardness also contributes, for more compact and solid members last longer, as we see in bones; whence also in a dead animal the flesh more easily, and still more easily the viscera and interior organs, which are softer, are corrupted. Finally, the temperament of place helps much, and other extrinsic celestial influences.

But you will object first: For the elements are not composed of contraries, therefore they alone from intrinsic cause are not corruptible, nor have a certain period of duration. Second, if inanimate things because of composition from contraries have a certain term, therefore in them one contrary acts on another, and thus one part of an inanimate thing will act on another, and again will convert something of the body joined to it, or placed within its pores therefore nothing will be lacking to it that it be said to be nourished like living things. Third, because death was brought in through sin, therefore it is not natural to man, rather it is natural to man, and to any thing, the desire of perpetuating its being, therefore a certain term of duration is not determined by nature. Fourth, through the tree of life man was rendered immortal, therefore a natural period of life was not for him, otherwise it could not be prolonged by that natural food. Similarly through medical art by drinkable gold, or the fifth essence of liquefied gold, life is prolonged very much, therefore a term of life is not naturally and necessarily constituted. Finally, in the first age of the world men lived very long, therefore the period of life, even now will be able to be naturally extended to their term, therefore a term is not naturally predetermined at least so short as now, and it will be able to be prolonged by some art.

To the first it is answered, that the elements from intrinsic nature have it to be passively corruptible, not actively with one part acting on another, nor through intrinsic mixture of contraries, because they do not admit the composition of miscibles, nor are they resolvable into other elements, and thus from within they do not have as it were active corruptibility from contraries, but passive, one element into another. But inanimate mixtures from within have a cause of corruption, because they are from contraries, and always some quality predominates, as St. Thomas teaches in II, distinction 19, question 1, article 4 ad 2, but nevertheless, because they are homogeneous, and all parts have the same disposition, one can scarcely act on another, and therefore they almost always need to be helped by an extrinsic corrupter. But when fire fails with combustible removed, it is not because from within one part acts on another, but because on account of its tenuity it cannot be defended from contraries, unless it is invited to some denser matter.

To the second it is answered, that inanimate things lack determined parts, and organs destined by nature, that one may act on another, and minister to another, and therefore per se they do not have to be nourished through taking in, because nutrition requires determined organs, and parts destined by nature for the reparation of what is lost; although on account of the mixture of contraries one part can act on another when in some one of the contraries predominates, nevertheless this of itself can equally befit any part where quality predominates, since all are homogeneous, nor are some parts and special organs destined by nature for such reaction, and reparation. But that it converts to itself what is placed next to it, is rather to generate something similar to itself, and to aggregate by accident, than to nourish, as we said more widely above in question eight.

To the third it is answered, that death is natural, and due to man considered according to his natural things as he is composed of contraries, but it is penal to man considered according to the state, which he had received from God from original justice, in which death had no place, and therefore with that lost it was brought in as punishment, just as the rebellion of the sensitive appetite would also be in pure nature, and nevertheless was made penal supposing the loss of state. See St. Thomas II-II, question 164, article 1 ad 1, and I-II, question 85, articles 5 and 6. But that to anything there is a natural desire of perpetuating itself, we say this desire is in the way that things can, not indeed of lasting without term in the same individual, for that is impossible through nature, but perpetuity is intended absolutely in species through multiplication, in the individual as much as it can according to the laws of nature.

To the fourth it is answered, that the tree of life did not render man simply immortal, but restored the purity of radical moisture from mixture of the extraneous, and fortified natural virtue, and that limitedly, and for a time, because its virtue was finite, and thus its consumption had to be repeated, that life might be prolonged further, as St. Thomas teaches in I part, question 97, article 4. Whence it did not take away the determined period of life, but amplified it. But whether it did those effects naturally? St. Thomas in II, distinction 19, question 1, article 4 ad 5, seems to concede that that virtue of the tree was natural, but did not give immortality simply, as has been said. But in the body of the article he says: "That the tree of life aided man, because by virtue divinely granted the food assumed was assumed into perfect assimilation." But virtue divinely granted does not seem natural, and arisen from the principles of nature. Whence Master Bannez is doubtful in this matter in I part, question 97, article 4, sole doubt ad 4. If however that virtue is said to be supernatural, it seems to have pertained to miraculous power, and to have been only instrumentally in that fruit, not radically, just as if to some thing were granted the power of healing blindness. But to that about the fifth essence of liquefied gold, we say it is a mere fiction, for no art can so purify moisture, and fortify weakened virtue, although it can repair, and defend from contraries to some degree, and preserve from some diseases.

To the last it is answered, that in the first age of the world there was also given a certain period of life, and term but longer than now on account of the greater virtue of nature, than now; greater efficacy of natural foods, especially with the earth not yet nearly sterilized through the saltiness of the waters of the flood; greater salubrity of air, and sobriety of men, and vigor of almost all natural causes. And nevertheless St. Thomas in q. 4 De Malo, art. 8 ad 11, and in II, dist. 32, q. 1, art. 3 ad 4, thinks that by Divine virtue longer length of life was then granted for the multiplication of the human race. And these things suffice for the exposition of the books on generation, to the praise and glory of our Savior Jesus Christ, and the Blessed Virgin, and St. Thomas Aquinas.

SUMMARY OF THE TEXT OF THE BOOKS ON GENERATION.

SUMMARY OF BOOK I.

Aristotle's intent in this first book is to discuss the origin and destruction of things in general, and those things that follow or accompany generation itself: in the second book he deals with the generable and corruptible in particular, namely, the elements which are the first generable bodies, and mixtures, which are formed from those first elements. Concerning generation in general he distributes ten chapters in this order. In the first two he reports the opinions of the ancients concerning generation and corruption, and their distinction from alteration. In the next two he declares his own opinion: from the fifth chapter to the tenth, he deals with those things that accompany or follow generation, such as augmentation and nutrition, action and reaction, contact and mixture.

Summary of Chapter I.

In this chapter the Philosopher intends to refute two opinions of the ancients concerning the difference between generation and alteration, but in the following chapter two others concerning the way in which some said generation happened. The opinions of the ancients, therefore, which he refutes in this first chapter are two. The first of those who posited that there was only one principle of natural things, and that it was actual being. For these could not distinguish generation from alteration. The second opinion was of those who posited multiple principles, who indeed could posit substantial generation distinct from alteration, but in fact did not posit it, because they said the qualities themselves were the forms of the elements, such as heat and cold, but they denied that one element could be converted into another, because they did not posit that they were composed of matter and form, but that they were first matters not resolvable into other principles, but he especially argues against Empedocles that he contradicted himself, because on one hand he denied that one element was generated from another according to substance, on the other he posited that all things were one in the beginning through confusion, and chaos, as if friendship were confounding them all:

which could not be without corruption, or if there was not corruption, and generation, how did many diversified things emerge from that one?

Summary of Chapter II.

Aristotle does two things in this chapter. First, he proposes two other opinions of the ancients concerning the mode of substantial generation. Second, he especially disputes against the second, and solves its reasoning. As to the first Aristotle teaches that it was already then a common opinion that generation and alteration were distinguished, and that generation happened through the congregation of some things, just as corruption through disgregation; but alteration through the transmutation of some passions. But in assigning the congregation from which generation happened, one was the opinion of Plato, another of Democritus and Leucippus. For Plato said that generation happened through the congregation of surfaces, or lines: but Democritus through the congregation of atoms, or indivisible bodies.

As to the second he posits the reasoning of Democritus, and solves it. The reasoning was this: either natural bodies are composed of indivisible bodies, or of divisible ones. If the first, the intended is had. If the second, therefore those divisible ones will be able to be divided again, and thus if all possible division is made totally, then with that made, either what remains will be a divisible body, and this not, because we suppose all division made: or it will be nothing, and thus body would be composed of nothing, but from nothing nothing is made: or there will be points, and this is impossible, because otherwise body would be composed of points alone, but a point added to a point, does not make greater, since it lacks quantity: or finally it will be resolved into qualities, and this not, because otherwise body would consist of qualities alone, and qualities thus resolved, would be separated from body. Aristotle responds that body is divisible into other divisibles successively, and syncategorematically, and in potency, but not that all division can be actually posited, but that something is so divided in act, that it still remains divisible, just as we say that from the matter of air diverse things can be generated, but not simultaneously, for it always remains in potency to something. Lastly he shows that natural generation does not happen through the congregation of diverse things, because generation does not happen through the position, and situation of parts like artifacts, as a ship, or house; then because this whole is dissolved, and another whole is generated.

Summary of Chapter III.

Aristotle does three things in this chapter. First, he inquires whether there is generation simply, that is, by which being is made simply, and substantially. Second, he proposes two doubts necessary for the resolution of the question. Third, he solves the principal question.

Concerning the first he posits the reason for doubting, because if being is made simply it ought to be made from its contrary, namely from non-being simply, but this is impossible, because that from which something is made, exists in that which is made, and is predicated of it just as the wood from which a chest is made, is in the chest, and is said of it, and thus non-being would exist in being, and be predicated of it.

Concerning the second he proposes two doubts, on which the resolution of the question depends. First, why generation never ceases on the part of material cause, for if in generation being is made simply, in corruption something ceases simply, and if through corruption some entity is consumed, since however the whole entity of the universe is finite, it will finally be consumed through the corruptions of things. He responds that the cause of this is not, because matter becomes infinite, since no infinite in act is given, nor that things which are generated now become smaller than before and so on, since we do not see this diminution, but things become equal to their generators, but the cause is, because the corruption of one is the generation of another, the same matter remaining, and thus finite matter suffices for infinite generations. The second doubt is, why if the corruption of one is the generation of another, some things are said to be generated simply as when man is made from an embryo, some according to a certain respect, as when from man a cadaver is generated, it is rather said that man dies, than that something is generated. It is answered that this is to be judged from the term of generation, for sometimes a complete and ultimate form is acquired, sometimes a middle form, and by which the way is prepared for another. When a form is acquired in the first way something is said to be generated simply, because generation stops there, as when man, horse, stone, etc. are made. But in the third way it is said to be made according to a certain respect, because something still remains to be done, as when the form of an embryo is made, it remains for man to be made, and when a cadaver is made, it remains for earth to be made to which it tends through the form of the cadaver. Second, when an accident is generated, generation happens according to a certain respect, when substance is made being simply. Third, when something is generated, which is not easily sensed as air, it is said commonly to be generated according to a certain respect.

Concerning the third he responds that generation simply is given. The reason is, because progression is given to being simply as to the form of fire, from the non-being of such form which is not simply in matter, therefore generation simply is given, just as also corruption, when on the contrary that being simply is changed into non-being. But what is that common subject to both forms, namely matter, whether it is non-being? He responds that it is being in potency, but not being in act, but it only has being non-being by reason of adjoined privation, because it lacks form. And thus generation does not happen from non-being in all ways, but from being in potency.

Summary of Chapter IV.

Having explained the question whether it is, concerning generation simply, namely that it is given, in this chapter he explains what it is. And he does two things. First, he teaches what generation and alteration are. Second, he assigns the differences between them.

Concerning the first he supposes that accidents differ from substance, because those inhere in this, as whiteness in man, and that change can be given concerning both, for we see sometimes man perish substantially, sometimes be changed according to accidents, as according to color or heat. Which being supposed he says alteration is change concerning quality with the same sensible subject remaining, as when water which was previously cold becomes hot. But substantial generation, is change according to the whole substance of the thing, or subject, and therefore the same sensible subject does not remain, as when fire is generated from wood, for only prime matter remains, which is not of itself sensible, but by reason of forms.

Concerning the second for handing down the differences between alteration and generation, he supposes that in generation itself sometimes transmutation of qualities also happens, as when hot fire is made from cold water, sometimes change of qualities does not happen, because a similar quality remains in what is generated, and in what is corrupted, but not a contrary one, e.g. when air is made from water, diaphaneity or transparency remains in both. This being supposed he assigns two differences between alteration, and generation. First, on the part of the term produced, because in alteration quality is produced, but in generation, substantial form. Second, on the part of the subject, because the subject of alteration is informed matter, or made in act, but of generation is prime matter capable of being informed, which is being in potency.

Summary of Chapter V.

From this chapter the Philosopher begins to treat those things which follow or accompany generation. And first he deals with augmentation, and nutrition in this chapter. In which he does three things. First, he posits the difference of augmentation from alteration, and generation. Second, he explains the mode by which augmentation, and diminution happen. Third, he explains how nutrition and augmentation differ.

Concerning the first, he says augmentation differs from alteration and generation in two things. First, on the part of the terms to which, because alteration is to quality, generation to substance, but augmentation to quantity. Second, because that which is generated, or altered, does not necessarily change place, as when in the same place wood is corrupted, and fire is made, but augmentation since it makes quantity grow necessarily requires some change in the place in which it is extended, and diminution will behave in the opposite way.

Concerning the second, for explaining the mode of augmentation he proposes two doubts and solves them, but he gathers two corollaries or suppositions. The first doubt is whether that which is augmented, requires the addition of something having magnitude, or lacking it. He responds that it is required that food, from which augmentation happens has quantity: both because it ought to have matter, which is not without form, nor this without quantity; and because it ought to add quantity to the preceding, therefore it ought to have some. The second doubt is, supposing that both that body to which augment comes, and food ought to have quantity, which of those is said to be augmented? He responds that food is not augmented but that body to which food comes through that augment. The reason is taken from the triple condition required for augment. First, that that which is augmented be augmented according to all parts. Second, that to all, and single of its parts something new be added. Third, that that which is augmented persevere the same in number. Since therefore food does not remain, but is converted into the substance of the living thing, but that which is nourished, and into whose substance it is converted, perseveres the same, perfectly this is the body which is augmented.

But two things which he supposes as certain. One is, that through augmentation first the similar parts are augmented, that is which are of the same nature in the whole and in the parts, as all flesh, all bone, etc. But by reason of similar parts he says dissimilar parts are augmented, e.g. foot, hand, arm, which consist of the similar themselves, and other adjoined things. The other is, that augmentation happens according to formal parts, insofar as the living thing remains the same in number the whole time, which is verified according to formal parts.

Concerning the third, he gathers that two changes intervene in the augment of a living thing, one substantial, by which food is corrupted, and puts on the form of the living thing; the other accidental, by which greater quantity is acquired and these changes agree in one thing, namely that both happen through some addition of food and quantity; but they differ in two things; first, that augmentation happens from quantity in potency, but nutrition from the same as in potency flesh, or bone according to which nutrition lasts for the time of life, but augmentation does not, but as long as virtue is so strong, that it can convert more, than lose.

Summary of Chapter VI.

In this chapter the Philosopher deals with the contact required between agent and patient. And he does two things. First, he explains the necessity of dealing with the contact of bodies, second, he explains three modes of contact, and which of them pertains to the present explanation.

Concerning the first, he shows it is necessary to deal with touch, because it is necessary to deal with action and mutual reaction, and with elements and mixtures, which are made from them, all of which cannot happen without contact, and therefore it must be dealt with.

Concerning the second, he posits three modes of contact. The first, which follows only local position and belongs to bodies even mathematically considered, and thus it is defined that those things touch whose extremes (that is, surfaces) are together, and have determined magnitude. The second is, properly physical contact, when namely actives and passives mutually act on and are acted upon by each other and the extremes are together, as air and water when they mutually act on each other and are conjoined, for it is physical contact, because it is according to motion or action and passion. The third is contact commonly said, because it is not mutual, nor reciprocal, but so one acts, that it is not acted upon by another, as intelligences touch the heavens, as heaven touches these lower things, as the saddening touches the saddened. And only the second acceptance of contact pertains to the present. Finally, he concludes two things. One is, that agent and patient have contrary qualities. The second is, that to be moved is more common than to act, taking action strictly as it is opposed to passion, which is with corruption, and thus to act is to move with disposition to corruption, which does not belong to all moving.

Summary of Chapter VII.

In this chapter and the two following the Philosopher deals with action and reaction, and indeed in this chapter he explains the condition of agent and patient both absolutely, and when they mutually react. In the following he adduces two opinions of the ancients concerning the mode of acting and being acted upon. And finally in the ninth chapter, from his own opinion he explains four conditions required for acting and being acted upon. Therefore in this seventh chapter he does three things. First, he explains the condition, and nature of agent, and patient as to this, that the patient ought to be similar to the agent or dissimilar. Second, as to this that the agent is reacted upon by the patient. Third, he explains to which genus of cause agent and patient pertain.

As to the first he reports first two opinions of Philosophers, of which the first said that agent and patient ought to be dissimilar, for if both are similar there is no greater reason why this should act, than that. The second said they ought to be similar, because those which are disparate and dissimilar, neither act, nor are acted upon, as white does not act on sweet, nor on heavy or light, etc. Aristotle rejects both as diminished. For that they cannot be altogether similar he proves, because there would be no reason, why one should be agent another patient, and because otherwise much more something would act on itself, if it acted on what is altogether similar. But that they cannot be altogether dissimilar is clear, because agent and patient cannot be altogether diverse, as heat and quantity which do not act on each other, but ought to be contraries, but contraries are under the same genus, and thus have some agreement and similarity. Wherefore from this he gathers, that agent and patient ought to be partly dissimilar, namely from the beginning of action, because then they are contraries, partly similar, namely in the end of action, because the agent intends to assimilate the patient to itself.

Concerning the second, whether namely the agent is reacted upon by the patient he supposes two divisions. First, that of mover, one is first, namely from which motion first begins, another ultimate, namely which is immediate to the movable. Second, of altering one is, first, namely which alters, and is not altered, as heaven, as a doctor who cures, and is not altered by the sick person another is ultimate, which per se attains the patient as medicine in healing. Thus therefore he responds, that when agent and patient have common matter and of the same nature, the agent can be reacted upon as all sublunary things because they have common matter, that is, mutually transmutable. But those which do not have common matter, as heaven with respect to sublunary things, so act, that they are not reacted upon. And in one word the first agent or altering is not reacted upon but the ultimate.

Concerning the third he teaches, that agent pertains to the genus of efficient cause, both because from it alteration begins, but efficient is whence motion begins; and because it does not pertain to another genus of cause, not to end and form, because agent is actually acting when action goes forth from it, but then end, and form are not yet, because if they were, action would cease. Nor does it pertain to the genus of material cause, because this is acted upon, and thus rather the patient pertains to it.

Summary of Chapter VIII.

He does two things. First, he proposes three opinions of ancient Philosophers concerning the mode of acting and being acted upon. Second, he refutes them. Concerning the first, the first opinion was of Empedocles, that bodies acted on each other, and were acted upon, insofar as one has pores, or concavities which another would enter as if penetrating, and thus mixture happens, and mutual action. The second opinion was of Democritus and Leucippus positing the same pores, but full of atoms or small bodies, which since they were discontinuous left something of vacuum through which they were moved, and through their congregation generation happened, but through disgregation corruption. The third opinion was of Parmenides and Melissus who posited that there was altogether one thing in the world, but segregated through some vacuities, but with vacuum removed all things were one, and similarly they required vacuum, that there might be motion, for if it were moved through the full, they said bodies would be penetrated.

Concerning the second, having compared those opinions among themselves, and in what they agree and differ, which is not of much interest, he attacks those two opinions about pores, and atoms. And indeed he reduces the opinion of Empedocles to the second, for they do not differ, except that the second opinion posits those vacuities full of small bodies, or atoms, but the first only posits those holes, or pores which other minute bodies would enter for acting. But he says those pores are superfluously posited for that mode of action, because either the small bodies entering them touch the solid parts, or not. If they do not touch, therefore neither do they act within them. If they touch, even without pores they will touch from without when brought near. But he attacks the second opinion about atoms more widely. But briefly it is proved, because as that opinion says action and passion happen through vacuum, but the atoms themselves do not have vacuum, therefore neither do they act nor are acted upon among themselves. Since everything which acts is soft, or hard, or affected by some similar quality, but an indivisible body, is neither soft, nor hard, etc. therefore it does not act, nor is acted upon.

Summary of Chapter IX.

In this chapter for establishing the true opinion concerning the mode of action, and passion he does two things. First, he posits the conditions required for acting, and being acted upon. Second, he shows the opinion of Democritus about atoms destroys generation, alteration, and augmentation.

Concerning the first, the conditions required for action, and passion are reduced to four. First, that the agent be in act, and the patient in potency, as fire acts as actually hot, wood is acted upon as it is in potency to heat. Second, that agent, and patient touch each other, either immediately if it is an ultimate and immediate agent, or mediately if it is remote, as the sun mediately through air touches the earth. The third condition, that agent, and patient not be continuous, that is, similar and of the same nature in acting, for otherwise things continuous according to quantity can well act and be acted upon, as a hot part of a body heats a not hot part. Fourth, that they be in due proximity, and one within the sphere of activity of the other. But he excludes a fifth condition, which some posited, namely that the patient not be acted upon according to every part, which is false, because if the patient is divisible, and has parts, if the agent is applied to all it will be acted upon according to all.

Concerning the second, he shows the opinion of Democritus related in the preceding chapter takes away alteration, and augmentation. Alteration indeed, because it is clear the whole body can be altered by heat, or cold without any division of the body, but those atoms within pores are congregated in generation, and disgregated in corruption, which cannot be without division. But it takes away augmentation, because in augmentation any part ought to be augmented, but in that opinion no part which is augmented is given, but all are indivisible and then atoms would only be apposed to atoms, which is not to be augmented intrinsically, but by juxtaposition.

Summary of Chapter X.

In this last chapter he deals with mixture, which especially conduces to the generation of those things, which are made from elements. But this chapter is divided into three parts. In the first, he shows mixture is given, in the second he explains how mixture happens. In the third he gathers what is miscible, and what mixture itself is.

Concerning the first, he reports the opinion of those denying mixture by this argument, because those things which are mixed, either remain as before, or are corrupted, or one remains, and another is corrupted. If the first, and third mixture does not happen, because what behaves as before, is not mixed, because it is not changed. If the second, from a thing destroyed, and not existing, mixture does not happen, therefore. The Philosopher responds that mixture is given, and he distinguishes it from other mutations. Mixture is indeed given, because miscibles remain in the mixture not according to act, but virtually and in potency, and thus from them altered, and remaining through their qualities, mixture happens. But it is distinguished from other mutations; from simple generation indeed, because in it something is totally corrupted, not from the concurrence of many, and with their virtual permanence, something is generated. It differs from alteration, and augmentation, because what is altered, and augmented, remains the same with alteration, and augmentation made, but what is mixed, with mixture made does not remain the same, but is changed into another.

Concerning the second, he reports first two opinions of the ancients concerning mixture. The first said mixture happens through division into most minute parts, which according to themselves are divisible, but to sense no longer appear divisible, as if wheat flour were mixed with barley flour. The second said, that mixture happens through division into minima, which not only to sense, but also according to themselves are no longer divisible. The Philosopher refutes both, because according to this mixture would be nothing other than the aggregation of many in one place, of which each would remain integral according to itself, and separated from another, although sense would not discern it: whence further it would happen, that the mixture would not be homogeneous, that is, that any mixed part, although we see the opposite, for mixture belongs to the whole and parts. It also repugns that the continuum be divided into parts no longer divisible, otherwise the continuum would be composed of indivisibles which was exploded in the sixth book of Physics.

But he hands down the true mode of mixture by explaining its three conditions. First, that miscibles be mutually active, and passive, for those which do not mutually act, are not mixed, as those which do not have matter of the same nature. Second, that they easily yield, and can be divided, as soft, and humid things are easily mixed, not hard as stone, and iron. Third, that they not be too large, because these are altered with difficulty, but are divided into small parts, that one may be able to enter another by acting on another, and easily altering. Wherefore mixture so happens according to these conditions, that the activity of one is proportioned to the resistance of another, and thus they come together in one temperament, for if one too much conquers another, mixture does not happen, but simple corruption, and generation, as if a drop of water falls into an amphora of wine.

Concerning the third he teaches, that miscible is that which acts, and that which is acted upon, that from both mixture may happen according to temperament. But mixture is the union of altered miscibles.

SUMMARY OF BOOK II.

Having explained the nature of generation and corruption, it remains to descend to the generable and corruptible things themselves. And first the elements occur, which are simpler bodies in the genus of corruptibles, then mixtures, which consist of them. And he does four things. First, he explains the principles of generation of the elements and their number. Second, he explains the generation of the elements themselves. Third, the generation of mixtures. Fourth, the universal causes of generation, and corruption, and its perpetuity.

Summary of Chapter I.

In this chapter he deals with the material principle of the elements. And first, having related those things which were treated in the first book, he rejects various opinions of the ancients, who posited for the material principle of the elements some body - some one only namely air, or fire; others many as fire, and earth, or also air and water, etc.; others said it was one receptacle of all forms, not explaining what they understood by that receptacle: these I say he rejects, and explains his own opinion, that the material principle of the elements is not some sensible body, but prime matter, which can be part of any body, yet is not separate from all substantial form, nor from all contrariety, that is, from all primary quality, and thus through this contrariety transmutation happens from one form to another, and around such matter as around a common subject generations, and corruptions of elements happen. And this because contraries cannot act on each other, and be transmuted, except by reason of some common subject, in which the transmutation of elements is exercised, and happens.

Summary of Chapter II.

In this chapter he assigns the formal principle, or forms of the elements, not indeed substantial forms, but accidental. And he does two things. First, he teaches that these forms of the elements are tangible forms not any whatsoever, but primary. Second, he enumerates all tangible qualities, and shows four of them to be primary to which the rest are reduced.

Concerning the first, he shows the proper forms of the elements ought to be tangible qualities, because elements are considered, as generable, and corruptible; therefore as active, and passive, but they exercise passion, and action through contact, therefore properly their forms are qualities as tangible and since they are first bodies, they ought to be first tangible qualities.

Concerning the second, he reduces all tangible qualities to seven contrarieties which touch attains, namely hot and cold, humid and dry, heavy and light, hard and soft, slippery and dry, rough and smooth, thick and thin. Of which two, namely heavy and light are principles of action which is local motion. But the rest are reduced to those four primary ones, namely hot and cold, humid and dry, because they are primary in acting and being acted upon, and therefore are properly forms of the first generable bodies, which are generated and corrupted through action, and passion. But hot, and cold are active, because hot is what congregates those things which are of the same genus; cold what congregates those which are of diverse genus; humid and dry are passive, because humid is what easily yields to alien terms; dry what yields with difficulty to alien, and is easily contained by its own.

Summary of Chapter III.

In this chapter the Philosopher does two things. First, he shows the number of elements to be four. Second, he teaches, what place, and what quality dominates in each element.

Concerning the first, he shows the number of elements from the combinations of four primary qualities, and from the authority of the ancients. From combinations indeed, because any element ought to have two qualities, that through one it may agree with one element, through another differ. But two contrary qualities cannot be combined, because they exclude each other, therefore only non-contrary ones ought to be combined. But these can be combined only in four ways, namely hot and dry, hot and humid, cold and humid, cold and dry, therefore there will be only four elements, because there are only four combinations. From authority he proves it, because none of the ancients exceeded the quaternary number of elements, although some posited fewer.

Concerning the second, he attributes to the elements, first that the superior, namely fire and air have the superior place under heaven, but the inferior, namely water and earth the inferior, that is, around the center. Second, that the extremes, namely fire and earth are purer, than the middle ones. Third, that the superior are contrary to the inferior. Fourth, that heat dominates in fire, humidity in air, coldness in water, dryness in earth.

Summary of Chapter IV.

From this chapter the Philosopher begins to deal with the generation of elements through the three following chapters. And in this first he posits four rules for discerning, how elements are transmuted into each other. And we suppose some to be dissimilar elements, or extremes, which namely do not agree in any quality as fire and water, others middle which agree in some quality as fire and air, water and earth.

The first rule therefore is, speaking absolutely, any element can be converted into another, since they have some contrariety. The second rule, transmutation is easier between similar elements than between dissimilar, because in those there is less contrariety, than in these. The third rule, from two dissimilar elements some third is more easily generated, than one dissimilar from another, as from fire and water air is more easily generated, than water, or fire, since more contrariety is to be overcome, that they be transmuted among themselves, than that they conspire into one third. The fourth rule, from two similar elements a third is not generated, but one from another, for they are of easy transmutation.

Summary of Chapter V.

In this chapter Aristotle inquires about the matter from which the transmutation of elements happens, for although he determined above that it is prime matter, which is common to all, here he proceeds specially against the opinions of some; for some posited some complete body or being in act to be the matter of this transmutation, whether it was one body or element, or many. But others posited that not all elements are transmutable to each other, but only similar ones. Others that none at all are transmutable to each other. And he refutes the prior opinions in the first part of the chapter, but the latter in the second part. But the last opinion he rejects in the following chapter. Therefore the prior opinions against which he often argued, especially in the first book of Physics, he attacks here from this, because if some complete being and in act were the principle of transmutation of elements, such transmutation would be alteration, not substantial generation, because the subject remains whole and complete under both terms, therefore its substantial, and first being is not changed, but accidental and superadded.

Concerning the second part of the chapter he shows against the aforementioned opinion that all elements even dissimilar are transmutable, because they have contrariety to each other, and thus act and are acted upon, and are transmuted. And second, he shows no elements, neither extreme, nor middle are the principle of generation of others, because if all are generable, none is the principle of generation, because the principle of generation is ingenerable, otherwise there would be process to infinity.

Summary of Chapter VI.

In this third chapter he rejects the opinion, which is of Empedocles, that namely no elements are transmutable to each other. Which opinion he refutes in two ways. First, by arguing it of contradiction. Second, by reducing it to impossibility. Of contradiction indeed he argues, because Empedocles confessed elements to be comparable to each other, which comparison can happen, either according to quantity, or according to virtue or quality, either of the same species, or diverse. But those which are thus comparable are also transmutable, because they act and are acted upon. But he reduces to impossibility, both because it takes away augmentation, that is, that one element can grow, if it cannot be transmuted from another; and because it takes away generation, for if elements are not corrupted, nor transmuted, but only congregated or disgregated, no new substantial form is given, but only accumulation of diverse things, therefore substantial generation is not given.

Summary of Chapter VII.

From this chapter he begins to deal with the generation of mixtures after the qualities, number, and generation of elements has been dealt with. But he treats of mixtures in this chapter and the following; in this chapter indeed he proposes a doubt how a mixture is made from elements. In the following he shows all four elements concur to mixture.

Concerning the first, he supposes there were two opinions, concerning elements, one that they are transmutable, because they have common matter: the other of Empedocles, that they are not transmutable, which he rejected in the preceding chapter, and in this he rejects again, because from it it follows that true mixture is not given, because elements do not pass into the mixture, but elements remain, and only because they are congregated, are said to be mixed. Whence he responds to the proposed doubt saying, that the qualities of elements are contrary as heat and cold, dryness and humidity, and they admit more and less, and thus sometimes one of them is perfect and in act, and of the opposite nothing is except in potency, as if heat were in the highest degree, but sometimes one is not perfect in act, because it is not in the highest degree but permits something of the opposite. Thus therefore one element can be applied to another in two ways. In one way so that one overcomes the other and transmutes it into itself, and then mixture does not follow, but simple generation; in another way such that neither conquers totally, but is tempered into one third, because their qualities are remitted, and are tempered to a certain degree and then a mixture will happen. Whence it is not necessary, that in mixture elements are so corrupted, that nothing of them remains, except matter, but they are so transmuted, that their qualities remain refracted, and this is to remain virtually.

Summary of Chapter VIII.

In this chapter he shows that all four elements concur in a mixture. Which he proves thus, because mixtures are in earth, and are naturally moved to it, therefore they participate in earth, which their thickness also shows. But earth since it is too dry unless helped by water, is not coagulated, but reduced to dust, therefore that the figure of the mixture be duly terminated, it needs coagulating moisture, which is water. Again earth and water are altered in the mixture, therefore by their contraries, but the contraries are fire and air, therefore these two elements also are required for the mixture. Second, he shows this from a sign, because mixtures are nourished by these two elements, namely water and earth, as is clear in plants, which are nourished by simpler food, and yet need two elements, namely water and earth for their nourishment, therefore a fortiori other living things, but if earth and water are in them, also fire and air because of the reason brought above, therefore similarly they will be from all elements, just as they are nourished from them. But incidentally he teaches that among the elements only fire is nourished, yet not properly like living things, which by taking in through themselves, but fire by consuming food placed near it.

Summary of Chapter IX.

From this chapter he treats the last part of the book, namely about the universal causes of generation, especially about the efficient cause. In this chapter therefore he does two things. First, he enumerates the triple cause required for generation, namely material, formal, and efficient; second, he rejects opinions about the efficient cause and leaves it proven, that it is required besides matter and form.

Concerning the second, he shows three causes are required for generation, two intrinsic, namely matter and form, another extrinsic, namely efficient. And in these matter is the principle that things are and are not, because it has potency to one form and to the privation of it. But form is the principle only that a thing is, and from it a thing has species, and with it the end coincides, because for its sake the agent operates in matter. But about the efficient is the whole difficulty.

Concerning the second therefore he proposes a double opinion of the ancients about the efficient cause. The first was of Plato, who posited that ideas or separate species cause the species of things by impressing themselves on matter and corrupt by rejection. The other was the opinion, which did not distinguish matter from efficient, but they said it was the principle of transmutation, through the qualities which it has, as through hot and cold. But he rejects the first opinion, both because if a separate idea made things by impressing itself, since that idea is always the same, it would always make the same, but would not make sometimes, and sometimes not make; and also, because in artificial things an efficient is given besides the idea, as a doctor effectively heals, and a teacher teaches, therefore also in natural things, because art imitates nature. But he rejects the second opinion, both because matter is pure passive potency, therefore it is not an active principle, or efficient but passive; and because in art, instruments and materials do not move themselves, but are moved by art, therefore also in nature matter does not move, but is moved, however much it has those qualities, just as a saw although it has the quality for cutting, unless it is moved by another, does not move.

Summary of Chapter X.

In this chapter he hands down his opinion about the efficient cause of generations. And he does three things. First, he repeats and supposes those things which he had said in Physics VIII about the unity of the first mover, and first motion. Second, he proposes a doubt about the variety of generations and corruptions whence it comes. Third, he gathers certain corollaries.

Concerning the first, he supposes what was said in Physics VIII namely that one first mover is given, and one first circular motion, and per se continuous, through which the first mover is the cause of the perpetuity of generations, because since that motion is perpetual and continuous, it is reasonable, that it is the cause of the remaining motions, which are not always, for rather that which is, ought to be the cause of that which is not, than conversely.

Concerning the second, a doubt arises from this immediately, because the same remaining the same always makes the same, but the first mobile is the same, and its motion always one, therefore they will not alter generations and corruptions, but will always make the same, the opposite of which we see. Aristotle responds that in heaven there is a double motion. One uniform from east to west, which is proper to the first mobile, and this does not cause variety of generations and corruptions. The other is not uniform, but consists of approach and recession to us, and the sun causes this through the zodiac and by reason of this variety of generations is caused, just as with the sun approaching us in the point of Aries all things grow green again, but receding in the point of Libra, they decrease. And thus it does not always remain the same and according to those contrary parts of approach, and recession, it causes contrary effects of generation and corruption.

Concerning the third, he gathers two corollaries. First, that for single living things a certain and determined period of life, and term is established. Second, that generations and corruptions can be perpetual, because their efficient cause, which is the sun, has perpetual motion, and intends perpetuity of generations. Lastly, he shows that as was said in Physics VIII and Metaphysics XII if motion is, a mover is, and if motion is continuous and perpetual, the mover, ought to be sempiternal, to which all motions are reduced.

Summary of Chapter XI.

In this chapter Aristotle intends to prove that generations are not perpetual as if in a straight line, but circularly. And for this he does three things. First, he premises certain things for proving the intent. Second, he proves it. Third, he solves two doubts.

Concerning the first, he supposes that some generations are necessary, which namely have a determined cause, as that tomorrow the sun will rise, some contingent, as that tomorrow Peter will walk. He supposes second, that when in one generation is the whole matter of another, from the generation of the prior the generation of the posterior follows, just as from evaporation cloud follows, from cloud rain. But if the generation of one is not the whole matter of another, just as the foundation is not the whole matter of a house, from the generation of the prior the posterior does not follow;

although on the contrary with a house generated, it follows that the foundation was generated.

Concerning the second, he proves that generations are perpetual through a circle and return to the same, not through straight tendency to always diverse things, without return to prior ones. For if there were always straight tendency, if it were finite, it would finally be consumed, and thus would not be perpetual. If infinite, it would not have first and last, and thus one would not be for the sake of another as for the sake of an end, because there is no end there, whence from the position of one it would not be necessary to posit another. But in a circle we see generations are perpetuated because of circular motion, by which the same always return in their times, and thus the sun extracts vapors, and these are forced into clouds, cloud is resolved into rain, and moistened earth again evaporates and makes clouds, and among these there is a necessary series, because one gives the whole matter to another.

Concerning the third, he posits two doubts. First, why in some things there is a circuit in generations, as vapor, cloud, rain, in others not, as among men and animals. He responds that in those is the whole matter of another, not in these, for the whole matter of a cloud is vapor, but the whole matter of a man is not his father. The second doubt, whether generation is so circular, that the same in number already corrupted returns, or only the same in species. He responds that those things which in transmutation are not corrupted in substance, are reiterated the same in number, as the same sun which sets rises; but those which are corrupted in substance are not reiterated the same in number, but in species.